



United States Department of Agriculture

# **Pocatello, Midnight, Michaud Allotment Management Plan Revisions**

## **Draft Environmental Impact Statement**



**Forest Service**

**Caribou-Targhee  
National Forest**

**Westside  
Ranger District**

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**Pocatello, Midnight, Michaud Allotment Management Plan Revisions**  
**Draft Environmental Impact Statement**  
Bannock County / Power County, Idaho

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**Abstract:** The Draft Environmental Impact Statement discloses the environmental effects of continued livestock grazing on three allotments on the Westside Ranger District, Caribou-Targhee National Forest. The project area is within the Lower Portneuf, Lower Bannock Creek, and Garden-Marsh Creek watersheds. The project area lies ten miles south of Pocatello, Idaho and encompasses 43,200 acres of national forest systems lands administered by the Westside Ranger District, Caribou-Targhee National Forest. The interdisciplinary team analyzed four alternatives; no permitted livestock grazing within the three allotments, a grazing alternative that emphasizes recreation settings and uses, an alternative that uses adaptive management to change conditions and proposes to map some prescription areas as “suitable” for grazing within the Forest Plan, and an alternative that changes Forest plan mapping for livestock grazing suitability but does not include adaptive management. Alternative 2 has been selected as the preferred alternative.

It is important that reviewers provide their comments at such times and in such a way that they are useful to the Agency’s preparation of the EIS. Therefore, comments should be provided prior to the close of the comment period and should clearly articulate the reviewer’s concerns and contentions. The submission of timely and specific comments can affect a reviewer’s ability to participate in subsequent administrative review or judicial review. Comments received in response to this solicitation, including names and addresses of those who comment, are part of the public record for this proposed action. Comments submitted anonymously will be accepted and considered; however, anonymous comments will not provide the respondent with standing to participate in subsequent administrative or judicial reviews.

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**Public Comments must be received within 90 days of Environmental Protection Agency published Notice of Availability (NOA) for the DEIS in the Federal Register.**



## Summary

The Caribou-Targhee National Forest proposes to reauthorize livestock grazing on three allotments and manage livestock grazing use that would meet or move resources toward the Revised Forest Plan, RFP, desired conditions. The area affected by the proposal includes the Lower Portneuf, Lower Bannock Creek, and Garden-Marsh Creek Watersheds. It is 10 miles south of Pocatello, Idaho and encompasses 43,200 acres of the National Forest Systems Lands administered by the Westside Ranger District, Caribou-Targhee National Forest. This action is needed, because current livestock management is not consistent with the Revised Forest Plan prescription 2.1.3(b) Municipal Watershed and 4.3 (b) Dispersed Camping Management.

### Proposed Action

The proposed action would reauthorize livestock grazing on the three allotments and manage livestock grazing use that would meet or move resources toward the Revised Forest Plan, RFP, desired conditions. The proposed action includes direction for livestock grazing in riparian areas using the Caribou National Forest Riparian Grazing Implementation Guide (i.e. site-specific riparian grazing management standards). It also includes adjusted structural range improvements (i.e. fences and water developments) to reduce the impacts to riparian areas and areas within the dispersed camping management prescription (4.3b). The proposed action also identifies the relocation for the municipal watershed fence. Specifics of the proposed action are outlined in Chapter 2.

### Purpose and Need for Action

The purpose of the project is to reauthorize livestock grazing in a manner that maintains and/or moves the project area toward RFP objectives and desired conditions. The previous Allotment Management Plans, AMPs, were completed in 1992. Various management changes have occurred between 1992 and the present. In 2003 the Forest Plan was revised; in 2005 the term grazing permits were modified with the RFP grazing management riparian and upland forage utilization standards; and in 2010 the Lower Portneuf Watershed Analysis (LPWA) was completed. The LPWA put forth revised management recommendations as well as identified areas not meeting RFP desired conditions. The grazing allotments are not meeting or moving toward desired conditions in an acceptable timeframe. There is a need for change from current livestock management. Several streams within these allotments are in various stages of achieving PFC. Site-specific recreation areas with livestock grazing conflict include: the northern-most dispersed camp site at the Pine Plantation (S. Fork Mink Creek Forest Plan Prescription 4.3b); southern half of Elk Meadows (Forest Plan Prescription 2.1.3b), and dispersed camp sites along the lower loop roads (Forest Road #2 and #890) below Scout Mountain campground and within the base area of the East Fork of Mink Nordic Center (Forest Plan Prescription 4.1b, Developed Recreation Sites).

The RFP specifically recognizes the continuing need for forage on a sustained-yield basis that meets rangeland values. The proposed action responds to the goals and objectives outlined in the RFP, and helps move the project area towards desired conditions described in the plan.

### Issues

Information gathered from the public involvement and internal scoping was analyzed to determine if concerns were raised relevant to the decision to be made. The interdisciplinary team reviewed each comment/concern and categorized into three groups:

- Group one includes issues that generate alternatives to the proposed action.
- Group two includes issues that did not drive an alternative. The consequences of these issues are disclosed in Chapter 4.

- Group three includes issues that are not relevant to or outside the scope of the project.

## **Group One – Issues that Generate Alternatives**

Two unresolved planning discrepancies were identified:

- The RFP contains confusing direction for the Municipal Watershed prescription (2.1.3b). One RFP standard states that “There shall be no livestock grazing within this area”, while another RFP guideline directs us to “Maintain existing watershed fences for exclusion of livestock” (RFP 4-27). The current allotment boundaries and fence location allows for livestock grazing on 1,711 acres of the 4,474 acre West Fork Mink Creek municipal watershed prescription area. The fence does not exclude livestock from the entire municipal watershed prescription as mapped in the RFP.
- There are two portions of drainages within the project area that are managed under the 4.3b Dispersed Camping Management Prescription. The East Fork of Mink Creek prescription area was mapped as an entire mapping unit during the RFP analysis. The South Fork of Mink Creek dispersed camp prescriptions (discrete camp site areas) were not mapped at the time of the RFP, but were identified as part of this analysis process. The unresolved planning conflict is livestock grazing within this prescription is inconsistent with the RFP. Livestock grazing is not suitable within the 4.3(b) prescription.

## **Group Two – Issues**

Issues for the Pocatello, Midnight, and Michaud AMP Revisions analysis were identified through public and internal scoping and defined as issues directly or indirectly caused by implementing the proposed action. Similar issues were combined into one statement where appropriate. The following three issues were determined to be significant and within the scope of the project decision. These issues are addressed through the proposed action and alternatives.

### Water Resources

Livestock grazing should be conducted such that the watershed and riparian resources are at, above, or moving towards the desired conditions of the RFP. It should be noted that livestock use is not the only use that can adversely affect watershed and riparian resources. Recreation uses, including dispersed camping and trail travel can affect vegetation cover and soils within watersheds.

Improper livestock management, from historic grazing and to a lesser extent recent management, has degraded watershed resources in some locations. Current management is also hindering the recovery of these resources in specific riparian and upland locations. Impaired water quality has been identified in Birch, Mink, Valve House Draw, Corral, South Fork Mink, Lower East Fork Mink, and Indian Creeks. Several streams within these allotments are in various stages of achieving PFC.

### Rangeland Health

Past livestock grazing and related activities (i.e., salting, fencing, water development, herding, grazing systems, artificial seeding,) have affected non-forested upland and riparian rangeland vegetation communities. Continued livestock grazing and related activities may change rangeland health indicators in the analysis area.

## Recreation

Livestock grazing and related activities are resulting in conflicts with recreation activities within the analysis area, specifically within the 4.3b management prescription. Areas of high recreational use such as along creeks also receive concentrated grazing use. Livestock grazing effects recreation experiences through livestock presence in dispersed campsites, livestock traveling on forest trails, and livestock proximity to developed sites. Site-specific recreation areas with livestock grazing conflicts include: the northernmost dispersed sites of the “Pine Plantation” (S. Fork Mink Creek Forest Plan Prescription 4.3(b); the southern half of Elk Meadows (Forest Plan Prescription 2.1.3(b)), and the dispersed camp areas along the loop roads below Scout Mountain campground (Forest Road #2 and #890) and the base area of the East Fork of Mink Creek Nordic Center (Forest Plan Prescription 4.1b, Developed Recreation Sites).

## Group Three - Non-Significant Issues –

### Outside the scope of the proposed action

- 1) A formalized and expanded designated Municipal Watershed Protection Area

### Already decided by law, regulation, Forest Plan, or other higher level decision

- 2) Stocking Rate Determination
- 3) Economic Analysis

## Alternatives Considered in Detail

**Alternative 1 –:** The Forest Service would not reauthorize livestock grazing. Permitted livestock grazing would cease two years after the notice of cancellation. The Shoshone-Bannock Tribe’s treaty rights of livestock grazing would remain with the following changes to comply with RFP direction:

- The municipal watershed fence would be moved to protect the entire municipal watershed from livestock grazing.
- Unit boundary fences would be realigned to exclude livestock grazing within the dispersed camping prescription 4.3(b); South Fork and East Fork of Mink Creek. All unneeded fences would be removed.

**Alternative 2\_** This alternative authorizes livestock grazing to be consistent with the 2003 RFP. The maximum season of use for each allotment would be from May 15 through October 10. Maximum head months permitted would be 4167 Head Month. Regardless of the grazing system used, no unit would be used first but once in a three year period. Alternative 2 also includes construction and reconstruction of range structural improvements identified in Chapter 2. .

This alternative would exclude grazing from the areas classified as 4.3 (b), Dispersed Recreation Management Prescription areas as identified in the RFP. This would effectively eliminate livestock grazing within East Fork of Mink Creek, South Fork of Mink Creek, and the vicinity of the Nordic Center. Additionally, livestock would not be allowed to graze within any portion of the area identified as the Municipal Watershed. This would effectively eliminate livestock grazing within Elk Meadows. Specific actions are identified in Chapter 2.

**Alternative 3-** This alternative was designed to respond to the purpose and need for action described in Chapter 1. Using adaptive management measures, it addresses the following issues: unresolved conflicts with the 4.3 (b) Dispersed Camping Prescription, and 2.1.3 (b) Municipal Watershed Prescription. The maximum season of use for each allotment would be from May 15 through October 10. Maximum head



months permitted would be 5941. Regardless of the grazing system used, no unit would be used first but once in a three year period. Alternative 3 also includes construction and reconstruction of range structural improvements identified in Chapter 2.

This alternative would allow livestock grazing from the areas classified as 4.3 (b), Dispersed Camping Management Prescription areas as identified in the RFP. Adaptive management measures would be used to reduce the recreation/livestock grazing conflict within East Fork of Mink Creek, South Fork of Mink Creek, and the vicinity of the Nordic Center. Additionally, livestock management measures would be implemented to exclude livestock grazing within any portion of the area identified as the Municipal Watershed. Specific actions are identified in Chapter 2.

**Alternative 4-** This alternative is the same as Alternative 3 with the following exceptions: 1. no adaptive management measures identified in Alternative 3 would be implemented; and 2. more restrictive riparian management would be implemented using the Grazing Implementation Guide (GIG). Specific actions are identified in Chapter 2.

This alternative would allow livestock grazing from the areas classified as 4.3 (b), Dispersed Camping Management Prescription areas as identified in the RFP. Recreation mitigation would be used to reduce the recreation/livestock conflict. Additionally, livestock would not be allowed to graze within any portion of the area identified as the Municipal Watershed. This would effectively eliminate livestock grazing within Elk Meadows. Specific actions are identified in Chapter 2.

### **Alternatives Considered but Not Given Detailed Study**

Additional alternatives were considered but not given detailed study for reasons described in Chapter 2. These include:

- Current livestock management.
- Eliminate all livestock grazing within Mink Creek drainage.
- Eliminate all livestock grazing within the Pocatello and Midnight allotments.

### **Affected Environment**

The analysis area occurs within the Lower Portneuf, Lower Bannock Creek, and Garden-Marsh Creek Watersheds. It is 10 miles south of Pocatello, Idaho and encompasses 43,200 acres of the National Forest Systems Lands administered by the Westside Ranger District, Caribou-Targhee National Forest. Pocatello, Midnight, and Michaud cattle allotments are included. Elevations range from 4,900 feet at the Forest Boundary to 8,700 feet at the summit of Scout Mountain. Precipitation ranges from 19 to 40 inches.

Chapter 3 describes each of the analysis areas, significant issues in detail and the environment that could potentially be affected by the alternatives.

### **Environmental Consequences**

Chapter 4 provides information concerning potential environmental consequences of the proposed action and alternatives. It also presents the scientific and analytical basis for the comparison of alternatives presented in Chapter 2. Each significant issue has a discussion of the potential effects (environmental consequences) to the resource associated with the implementation of each alternative. All significant or potentially significant effects; including direct, indirect, and cumulative effects, are disclosed.

### **Comparison of the Alternatives**



The following table briefly summarizes the effects of the alternatives by issue. More information is available in Chapter 2. A detailed disclosure of environmental consequences is found in Chapter 4.

**Table S-4 Comparison of Alternatives**

Consequences	Alternative. 1	Alternative. 2	Alternative. 3.	Alternative. 4.
<b>Municipal Watershed</b> Acres within the West Fork Mink Creek watershed available to livestock grazing.	0 acres = 0%	0 acres = 0%	Up to 1,711 acres = 38%  Up to 3,368 acres	0 acres = 0%
<b>4.3 (b) Dispersed camping prescription</b> Percent of not suitable acres	5481 acres	5481 acres	180 acres	180 acres
<b>Issue 1.</b> Watershed & Riparian Resources available to grazing  <b>Indicator</b> Acres of AIZ available to livestock grazing.	0 acres if Tribal rights are not exercised.  Up to 2,774 acres if Tribal rights are exercised.	Up to 2,774 acres.	Up to 3,368 acres.	Initially 3,107 acres;  Up to 3,368 acres  Initially rest 261 acres until improved.
<b>Indicator</b> The relative rate of improvement towards DFCs. This indicator is a comparison of alternatives relative to one another (i.e. low, moderate, high rates of improvement).	High if Tribal rights are not exercised.  Moderate if Tribal rights are exercised.	Moderate to High	Low	Moderate overall, but High in those riparian areas with declining trends
<b>Issue 2</b> Rangeland Health <b>Indicator:</b> Rate of improve condition and trend.  Rate of invasion and spread	On average, ground cover conditions show moderate upward trend toward desired condition (short-term).  Slow rates of change in grazed-induced seral stage.  Moderate overall effect. Less than 0.005 % increase risk of noxious weed from structural improvements	Light to moderate grazing – expecting increase ground-cover-measurements. Upward trend is expected. Slow rates of change in grazed-induced seral stage. Reduce  Moderate overall effect to noxious weeds. 0.07% increase risk of noxious weeds from structural improvements.	. Light to moderate grazing – expecting increase ground-cover-measurements. Upward trend is expected. Slow rates of change in grazed-induced seral stage.  Moderate overall effect to noxious weeds 0.07% increase risk of noxious weeds from structural improvements.	Light to moderate grazing – expecting increase ground-cover-measurements. Upward trend is expected. Slow rates of change in grazed-induced seral stage.  Moderate overall effect to noxious weeds. 0.07% increase risk of noxious weeds from structural improvements
<b>Issue 3</b> Recreation <b>Indicators:</b> Does Alternative meet ROS and VQOs in short-term/long-term? In most or some areas of high recreation use.	This alternative would improve recreation setting and scenery in year 2017 in most heavy-use recreation areas	This alternative would improve recreation setting and scenery in year 2015 in most heavy-use recreation areas.	This alternative would improve recreation setting and scenery in year 2019 in some heavy-use recreation areas	This alternative would improve recreation setting and scenery in year 2015 in many heavy-use recreation areas



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# Chapter 1. Purpose of and Need for Action

## Introduction

The Forest Service has prepared the Draft Environmental Impact Statement (DEIS) on the potential effects of authorizing continued domestic livestock grazing in the Pocatello, Midnight, and Michaud project area (see Figure 1-1) in compliance with the National Environmental Policy Act (NEPA) and other relevant federal and state laws and regulations. The project area is within the Lower Portneuf, Lower Bannock Creek, and Garden-Marsh Creek Watersheds. It is 10 miles south of Pocatello, Idaho and encompasses 43,200 acres of the National Forest Systems Lands administered by the Westside Ranger District, Caribou-Targhee National Forest. Elevations range from 4,900 feet at the Forest Boundary to 8,700 feet at the summit of Scout Mountain. Precipitation ranges from 19 to 40 inches.

Additional documentation, including more detailed analyses of project area resources, may be found in the project planning record located at Westside Office in Pocatello, Idaho.

## Background

Livestock grazing on National Forest System lands is conducted in accordance with applicable regulations, agency policies, and federal laws including the Endangered Species Act (ESA), National Forest Management Act (NFMA), Clean Water Act (CWA), and National Historic Preservation Act (NHPA). Planning and decision making for rangeland management is done at the Forest Plan level and site-specific implementation is done at the project level. Compliance with the National Environmental Policy Act (NEPA) is necessary at each of these two stages. Where project level NEPA analysis is not current on an allotment, it needs to be conducted. This allotment analysis is necessary to comply with Public Law 104-19. The procedure is outlined below.

An allotment is a designated area of land available for domestic livestock (cattle and/or sheep) grazing. The Federal Land Policy Management Act (FLPMA), as amended by the Public Rangelands Improvement Act, allows for Allotment Management Plans (AMPs) to be included in grazing permits at the discretion of the Secretary of the Agriculture (43 USC 1752(d), as amended by 92 Stat. 1803 [1978]). The Secretary has elected to exercise this discretion, and has delegated his authority to issue regulations in this area to the Chief of the Forest Service (See 36 CFR 222.1 and 222.2).

An AMP is defined in FLPMA as a document prepared in consultation with leases or permittees that applies to livestock operations on the public lands and prescribes:

1. The manner and extent to which livestock operations will be conducted in order to meet multiple use, sustained yield, economic, and other needs and objectives.
2. Range improvements to be installed and maintained.
3. Such other provisions relating to livestock grazing and other objectives found by the Secretary to be consistent with provisions of FLPMA.

In February 2003 the “Revised Forest Plan for the Caribou National Forest” (RFP) was signed. The RFP provides for multiple-use and sustained yield of goods and services from the Forest. Forest plans determine the capability and suitability of the plan area and establish programmatic direction including goals, objectives, standards, guidelines, and monitoring requirements.

Authorization to graze the specific area is needed through a project level National Environmental Policy Act (NEPA) decision (FSH 2209.13 Chapter 91). If the decision is made to continue authorized livestock grazing within the project area, AMPs implement the applicable management direction from the NEPA decision. The AMP is added to the Term Grazing Permit that authorizes a permittee to graze livestock on National Forest System lands. The permittee is required by the permit to graze livestock under certain specified terms and conditions designed for resource protection and enhancement. These are listed under Part 2 and Part 3 of the Term Grazing Permit and in the Operating Instructions that the permittee receives annually.

The objectives of the range management program for the National Forest are:

- Manage the range vegetation to protect basic soil and water quality resources, provide for ecological diversity, improve or maintain environmental quality, and meet public need for interrelated resource use [FSM 2202.1 (1)].
- Integrate management of range vegetation with other resource programs to achieve multiple use objectives contained in Forest land and resource plans [FSM 2202.1 (2)].
- Provide livestock forage, wildlife food and habitat, outdoor recreation, and other resource values dependent on range vegetation [FSM 2202.1 (3)].
- Contribute to the economic and social well-being of people by providing opportunities for economic diversity and by promoting stability for communities that depend on range resources for their livelihood [FSM 2202.1 (4)].
- Provide expertise on range ecology, botany, and management of grazing animals [FSM 2202.1 (4)].

The objectives of the range management program for the Caribou-Targhee National Forest are:

- By 2010, complete NEPA decision documents on all allotments as specified in the Recession Act Schedule (Section 504 of Public Law 104-19) – RFP 3-42.
- Within one year of the signing of the ROD, incorporate the riparian grazing standards into livestock grazing permits and annual operating instructions –RFP 3-42.



Figure 1-1 Vicinity map

National Forest planning takes place at several levels: national, regional, forest, and project levels. This EIS is a project-level analysis; its scope is confined to addressing the significant issues and possible environmental consequences of the project. It does not attempt to re-address decisions made at higher levels. It does, however, implement direction provided at those higher levels.

The Forest Plan embodies the provisions of the National Forest Management Act, its implementing regulations, and other guiding documents. The Forest Plan sets forth in detail the direction for managing the land and resources of the Caribou National Forest. Where appropriate, the DEIS tiers to the Revised Forest Plan FEIS, as encouraged by 40 CFR 1502.20.

The RFP uses management prescriptions to guide management of the National Forest lands within the Caribou National Forest. Each management prescription provides for a unique combination of activities, practices, and uses. The project area is within Basin and Range Transitional Mountains Subsection -M331Du (RFP 4-1 to 4-2). The management prescription includes Prescription 2.1.2 - Visual Quality Maintenance (RFP 4-23), Prescription 2.1.3(b) Municipal Watershed Prescription (RFP 4-25); Prescription 2.7.2(d) - Elk and Deer Winter Range (RFP 4-44), Prescription 2.8 Aquatic Influence



Zone (RFP 4-45), Prescription 3.2 Semi-primitive –Recreation (RFP 4-57), Prescription 3.3 (b) Semi-primitive – Restoration (RFP 4-59); Prescription 4.3(b) Dispersed Camping Management (RFP 4-68); , Prescription 5.2(b, c, and f) Forest Vegetation Management (RFP 4-71), Prescription 6.2 (b)-Rangeland Vegetation Management (RFP 4-75), and Prescription 8.1 (b) Concentrated Development Areas (RFP 8.1). Desired Future Conditions, Goals, Objectives, Standards, and Guidelines (RFP Chapter 3) of each are summarized within the project record. The locations are shown in Figure 1-2. Larger scale maps and Forest Plan Prescription acreage by allotment are available in the project file.

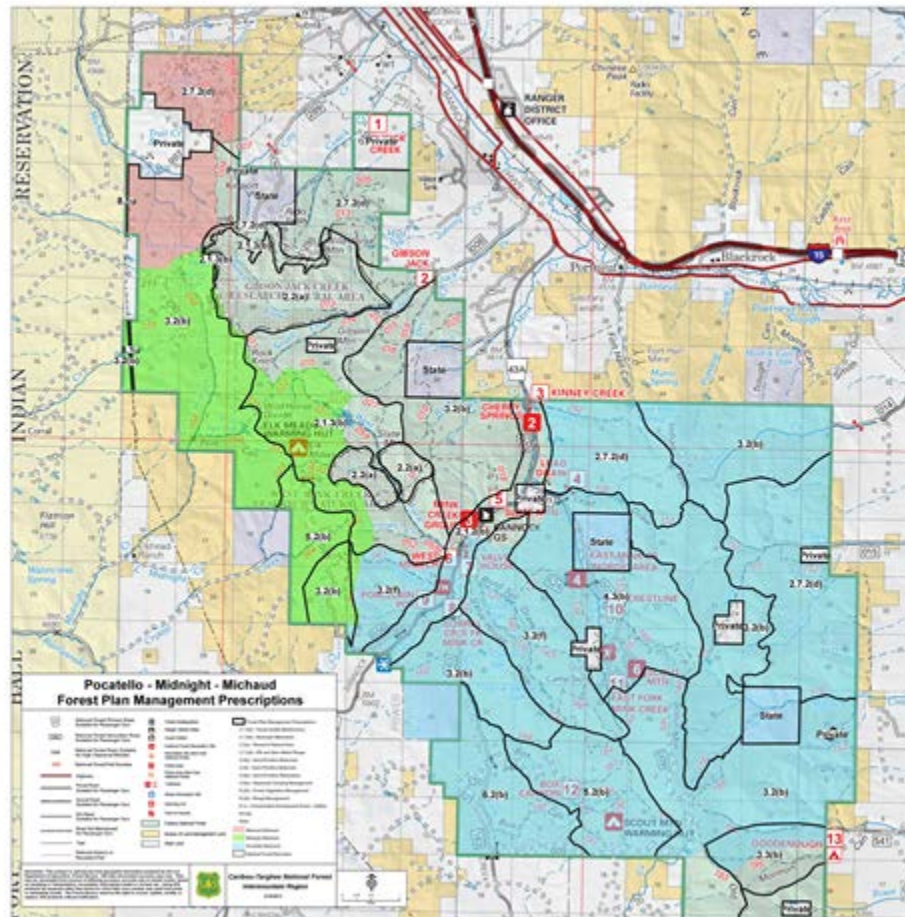


Figure 1-2. RFP prescriptions (2003)

## Purpose and Need for Action

The purpose of this project is to reauthorize livestock grazing in a manner that maintains and/or moves the area toward RFP objectives and desired conditions. The previous AMPs were completed in 1992. Since that time, the following have occurred: The Forest Plan was revised in 2003; Term Grazing Permits were modified with the Forest Plan Grazing Management riparian and upland forage utilization standards in 2005; and Lower Portneuf Watershed Analysis (LPWA) was completed and included revised management recommendations as well as identified areas not meeting Forest Plan Desired Condition in 2010. There is a need for change from the current management as the allotments are not meeting or moving toward desired

conditions in an acceptable timeframe. Streams currently not at proper functioning condition (PFC) include Trail and Michaud Creeks in the Michaud Allotment; Upper Midnight and lower Crystal Creeks in the Midnight Allotment; and Indian, Walker, Kinney, Lead Draw, Corral, East Mink, and South Fork Mink Creeks (Catch & Unit 6). Site-specific recreation area with livestock grazing conflict include: Northernmost dispersed site at the Pine Plantation (S. Fork Mink Creek Forest Plan Prescription 4.3 (b)); Elk Meadows (southern half of area - Forest Plan Prescription 2.1.3(b)), and Loop Road below Scout Mountain Camp Ground and Nordic Center (Forest Plan Prescription 4.3(b)).

This action responds to the goals and objectives outlined in the RFP, and helps move the project area towards desired conditions described in that plan. Specifically, the RFP recognizes the continuing need for forage on a sustained-yield basis that meets rangeland values.

## Proposed Action

The proposed action is to reauthorize livestock grazing on the three allotments and manage livestock grazing use that will meet or move resources toward the RFP desired conditions. The proposed actions includes direction for livestock grazing in riparian areas using the Caribou National Forest - Riparian Grazing Implementation Guide (i.e. site-specific riparian grazing management standards); adjusted structural range improvements (i.e. fences and water development) to reduce the impacts to riparian areas and areas within dispersed camping management prescription and identifies the municipal fence location. Specifics of the proposed action are outlined in Chapter 2.

## Decision Framework

Based on the environmental analysis in this DEIS, the District Ranger will decide whether or not to reauthorize livestock grazing within the Pocatello, Midnight, and Michaud Allotments. If livestock grazing is reauthorized, the responsible official will also decide on basic elements of an allotment management plan: livestock management objectives, practices (including maximum amount of use to meet management objectives), structural and non-structural improvements necessary to meet management objectives, and a monitoring plan to determine whether management objectives are being met and any adaptive management measures needed.

## Public Involvement

### Scoping

The project has been listed on the Caribou-Targhee National Forest Schedule of Proposed Actions (SOPA). This project has been listed in the Caribou-Targhee SOPA every quarter since October –December 2010. The SOPA is distributed to over 1,300 people including a wide array of governmental agencies, interest groups, and interested individuals. The SOPA is also posted on the Caribou-Targhee web site ([www.r4.fs.fed.us/caribou](http://www.r4.fs.fed.us/caribou)). A Notice of Intent to prepare an Environmental Impact Statement was issued in the Federal Register on January 15, 2014. To date, the public has been invited to participate in the project in the following ways.

### Public Mailing

In December 2013, letter providing information and seeking public comment was mailed to approximately 155 individuals and groups. This included Federal and State agencies, Native American groups, municipal offices, businesses, interest groups, and individuals. Two additional letters were sent to responders of the Notice of Intent. A total of sixty-five responses

to this initial mailing was received and can be reviewed in the Project File at the Westside District Ranger District Office in Pocatello, Idaho.

### Local News Media

Announcements about the project were printed in the Idaho State Journal (December 2013). Newspaper articles includes Capital Press (2014), Idaho State Journal (December 2010 and January 2014), and Portneuf Valley Audubon Society News (2013 and 2014)

### Meetings with Agencies, Communities, Native Groups and Others

Forest staff met with the Shoshone-Bannock Tribe concerning Tribal Treaty Grazing Rights. This project was also discussed at United States Fish and Wildlife Service (USFW) streamline section 7 consultation meeting (Streamline Sec.7 form March 12, 2014). Forest Staff also met with Bannock County commissioner convened Lower Portneuf Grazing Collaborative Work Group (2013).

Using the comments from the public, other agencies, and Forest Specialists (see Issues section), the interdisciplinary team developed a list of issues to address.

## Issues

The Forest Service separated the issues into two groups: significant and non-significant issues. Significant issues were defined as those directly or indirectly caused by implementing the proposed action. Non-significant issues were identified as those: 1) outside the scope of the proposed action; 2) already decided by law, regulation, Forest Plan, or other higher level decision; 3) irrelevant to the decision to be made; or 4) conjectural and not supported by scientific or factual evidence. The Council on Environmental Quality (CEQ) NEPA regulations explain this delineation in Sec. 1501.7, "...identify and eliminate from detailed study the issues which are not significant or which have been covered by prior environmental review (Sec. 1506.3).... A list of non-significant issues and reasons regarding their categorization as non-significant may be found in the project record.

As for significant issues, the Forest Service identified the following issues during scoping:

Information gathered from the public involvement and internal scoping was analyzed to determine if concerns were raised relevant to the decision to be made. The interdisciplinary team reviewed each comment/concern and categorized into three groups:

- Group one includes issues that generate alternatives to the proposed action.
- Group two includes issues that did not drive an alternative. The consequences of these issues are disclosed in Chapter 4.
- Group three includes issues that are not relevant to or outside the scope of the project.

### **Group One – Issues that Generate Alternatives**

Unresolved conflicts or issues identified:

Municipal Watershed Fence location:

According to the RFP, municipal watersheds of West Mink Creek and Gibson Jack are closed to livestock grazing. Additional direction is to maintain existing watershed fences for exclusion of livestock (RFP 4-27). The current fence

location includes 1,711 acres of the municipal watershed prescription in the Midnight Cattle Allotment.

**Indicators:**

- Percentage of Municipal watershed excluded from livestock grazing.

Dispersed Camping Prescription 4.3(b)

Two 4.3 (b) Dispersed camping prescription areas were identified within the project area. The East Fork of Mink Creek was mapped during the RFP and South Fork of Mink Creek was mapped as result of this project. Livestock grazing within this prescription are inconsistent with the RFP. The RFP directions for 4.3 (b) prescriptions include:

- According to the Forest Plan, 4.3 (b) prescription states “*Explore opportunities to reduce the level of grazing in the East Mink Creek area on an opportunity basis* (RFP 4-70).”
- Current RFP direction classification of suitable rangeland states the entire 4.3 (b) polygon is unsuitable [Notes Range Suitability (May 8, 2002 and Range Suitability May 14, 2002)]. During the project-level suitability validation, RFP not suitable determination was analyzed within a ¼ mile buffer along the road within the East Fork of Mink Creek 4.3 (b) polygon, not the entire polygon (FEIS Appendix B-55).

The unresolved conflict is the need to modify the RFP suitability determination or change the AMP prescription in the AMP.

**Indicators:**

- Percent of suitable acres

## Group Two – Issues

Significant issues for the project were identified through public and internal scoping and defined as those directly or indirectly caused by implementing the proposed action. Similar issues were combined into one statement where appropriate. The following four issues were determined to be significant and within the scope of the project decision. These issues are addressed through the proposed action and alternatives.

## Water Resources

Livestock grazing should be conducted such that the watershed and riparian resources are at, above, or at least moving towards, the desired conditions. Historical livestock management resulted in excessive stream bank trampling and overuse of riparian vegetation that in turn degrades stream channel stability, water quality, aquatic habitat, and riparian health. Streams currently not at PFC include Trail and Michaud Creeks in the Michaud Allotment; Upper Midnight and lower Crystal Creeks in the Midnight Allotment; and Indian, Walker, Kinney, Lead Draw, Corral, East Mink, and South Fork Mink Creeks (Catch & Unit 6)...

**Indicators:**

- Area of the Aquatic Influence Zone (AIZ) available to grazing (acres)
- The relative expected rate of improvement towards desired conditions (e.g. 80% stream bank stability and proper functioning conditions in riparian areas). This indicator is a comparison of alternatives relative to one another (i.e. low,

moderate, high rates of improvement).

### **Rangeland Health**

Livestock grazing and related activities (i.e., salting, fencing, water developments, and herding, grazing systems, artificial seeding) have affected non-forested upland and riparian rangeland vegetation communities. Continued livestock grazing and related activities may change rangeland health indicators in the analysis area.

#### ***Indicators:***

Rate of improve condition and trend.

#### **Noxious Weeds**

Proposed range structural improvement construction (e.g. fences and water developments) has the potential to introduce and/or expand noxious weed infestations within riparian areas, uplands, and aspen vegetative communities.

#### ***Indicators***

Rate of invasion and spread.

### **Recreation**

Livestock grazing and related activities have affect recreation within the analysis area. Areas of high recreational use such as along creeks tend to also receive grazing use. Livestock effect recreation through livestock presence in dispersed campsites, livestock traveling on forest trails, and livestock proximity to develop sites. Site-specific recreation area with livestock grazing conflict include: Northernmost dispersed site at the Pine Plantation (S. Fork Mink Creek Forest Plan Prescription 4.3(b)); Elk Meadows (southern half of area - Forest Plan Prescription 2.1.3(b)), and Loop Road below Scout Mountain Camp Ground and Nordic Center (Forest Plan Prescription 4.3(b)).

#### ***Indicators:***

- Acres in VQO Prescription
- Acres in ROS Prescription

### **Group Three - Non-Significant Issues**

Non-significant issues were identified as those: 1) outside the scope of the proposed action; 2) already decided by law, regulation, Forest Plan, or other higher level decision; 3) irrelevant to the decision to be made; or 4) conjectural and not supported by scientific or factual evidence. The Council for Environmental Quality (CEQ) NEPA regulations require this delineation in Sec. 1501.7, "...identify and eliminate from detailed study the issues which are not significant or which have been covered by prior environmental review (Sec. 1506.3)..." A list of non-significant issues and reasons regarding their categorization as non-significant may be found in the project record. Following the significant issues, the conditions and effects are described for resources which are of concern but did not drive alternatives. These disclosures are specifically required by law, regulation, or policy.

#### **1) Outside the scope of the proposed action**

- **A formalized and expanded designated Municipal Watershed Protection Area**

Rationale for no further consideration: This decision was made in the Revised Forest Plan and is not within the scope of this decision. The purpose of this project is to reauthorize livestock grazing in a manner that maintains and/or moves the area toward Forest Plan objectives and desired conditions. Expanding the Municipal Watershed prescription area, which was established in the 2003 Revised Forest Plan for the Caribou National Forest, is a decision that goes beyond the scope of this livestock grazing reauthorization analysis.

## **2) Already decided by law, regulation, Forest Plan, or other higher level decision**

### Stocking Rate Determination

Rationale for no further consideration: Decreasing the number of livestock is commonly offered as a solution; however, even under light stocking rates, livestock tend to concentrate on riparian vegetation. The effect of grazing to a specified use level would be analyzed, not the attribute of the Term Grazing Permit (e.g. the numbers and season on Part 1 of the Term Grazing Permit). According to Forest Service policy, changes in permitted numbers and seasons, allotment boundaries adjustments, grazing strategies, etc... are administrative decisions (FSH 2209.13). Generally, the Forest would monitor the allotment for three-years to “firm-up” the grazing capacity. This is done by comparing the allowable use to actual use. If livestock have to leave early every year to stay within the utilization standards then it is likely their permit would be reduced to reflect that. Those decisions are already decided by regulation and policy and are therefore outside the scope of this decision. In addition, the following letter was sent from the WO letter (6/18/2008) to John Marvel, executive director of Western Watershed in response to March 20, 2008 regarding livestock weights, forage consumption, and request to adjust the stocking rates with reference to Dr. John Carter’s, Updating the Animal Unit Month:

*“For grazing capacity and utilization purposes, forage use factors, which might include animal size, may be used and adjusted to fit site-specific conditions as determined by local officials. However, the use of forage factors is generally only pertinent when stocking a range where there has been no livestock use or where there has been extensive management with little to no monitoring.*

*Proper stocking rates are site-specific thus they can be highly variable. Key factors influencing proper stocking on any given parcel of land include, but are not limited to: permittee management knowledge and effectiveness, topography, water availability, plant communities and their distribution, aspect, slope, forage palatability, current year’s precipitation and seasonal distribution, fire (both wild and prescribed), drought, wildlife effects, recreational activities, livestock age and size, and so forth. The bottom line is that for any given allotment, proper stocking rates can and will vary significantly depending on these types of variables. Generally, we define the range or variability for proper stocking rates, but it is nearly impossible to pinpoint one “proper stocking rate”.*

*The Forest Service focuses its management on the land and vegetation rather than just on livestock needs. That is, for any given allotment, desired conditions are set. Then, criteria are established, based on the best available scientific information, which are designed to meet or adequately move the allotment toward desired conditions. In this context, animal size and stocking rate are only one factor out of many that must be considered. Generally speaking, allowable use levels are*

*determined as an outcome of the preparation of allotment management plans, as a result of site- specific NEPA. The concept of using allowable use as a management trigger is that when an allowable use level is reached on a key species or key area, the livestock are moved or removed. With this type of management, i.e. specifying allowable use on key species or key areas, the size of the livestock is not highly relevant. With larger animals, and presumably a corresponding greater consumption rate, the allowable use level might be met sooner and the livestock moved off the pasture sooner than would occur with smaller animals. The stocking rate in this case becomes self-regulating because management is based on meeting plant and other resource needs by meeting design criteria. Of course, there are other criteria being applied as well including seasonal restrictions, etc., all of which are designed to meet or move toward desired conditions.*

### **Economic Analysis –**

Rationale for no further consideration: The decision to authorize grazing will not be made on the basis of economics, and the relative economic contributions of grazing versus recreation will not be the basis for land use allocations. (40 CFR 1508.23) The 2003 Forest Plan includes direction to provide for both uses, as long as certain conditions are met. These conditions do not include economic considerations.

How a permittee conducts operations to make it profitable includes many factors such as private land available, other allotments with the FS and/or BLM, price of livestock, etc. Trying to conduct an economic analysis of all these factors relative to HMs authorized on three allotments on the National Forest is too speculative to validly assess. Therefore, economics will not be carried forward.

## **Other Related Efforts**

The following resources are important in the analysis area but effects on them have been effectively mitigated with the proposed action and they will not drive formulation of alternatives to that Proposed Action. Disclosure of effects on these resources however, is required by law, regulation, and policy.

## **Wildlife Habitat and Management Indicator Species**

### Threatened and Endangered Species (T&E)

Federal agencies are mandated to analyze effects of proposed projects on T&E species according to the Endangered Species Act of 1973. To meet this requirement, biological assessments (BA) for species known to occur or which may occur in the analysis area have been prepared by Forest Service biologists and would be forwarded to the United States Fish and Wildlife Service (USFWS) for consultation for any “may effect” determinations.

### Sensitive Species

The Forest Service is required to analyze the effects of proposed projects on sensitive species. A Regional Sensitive Species list was provided to the Forest by the Intermountain Region (Region 4) of the Forest Service. This list identifies sensitive species that may occur on the Westside Ranger District. Biological evaluations (BE's) for sensitive species have been prepared by IDT members which analyze the effects of the proposed actions on these species.



### Management Indicator Species (MIS)

Wildlife field reviews throughout the project area indicate that upland and mountain brush habitat within the allotments are currently only minimally impacted by livestock grazing activities. Riparian areas (including perennial and intermittent streams, springs, seeps, and ponds) are extremely important areas for Sensitive species, MIS species (goshawk and Columbian sharp-tailed grouse), and species of local concern (such as Mule Deer, migratory birds, and beaver). Improper livestock management can result in overuse of riparian vegetation that in turn reduces the quantity and quality of wildlife habitat within the riparian area. Therefore, the key issue is the effect of livestock grazing on riparian vegetation. Effects on these habitats are discussed in Group 2 Issues 2.

## Heritage Resources

Under the National Historic Preservation Act (NHPA), a significant or adverse effect is one which may diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or associations (36 CFR 800.9[b]). Therefore, livestock grazing has the potential to affect historic or cultural resources three distinct ways. The first is the physical destruction, damage, or alteration of all or part of the property. The second is through isolation of the property from or alteration of the character of the property's setting when that character contributes to the property's qualification for the National Register through construction of grazing facilities or concentration of grazing activities within or adjacent to such properties. The third is through the introduction of visual, audible, or atmospheric elements that are out of character with the property.

The following resources were considered during the analysis. These resources are not impacted by the proposed action or by any of the action alternatives. These actions will not be addressed any further in this document. The rationale for not carrying them further in the document is also displayed.

### Climate Change

By showing compliance with the Forest Plan direction, we are best assured of maintaining resilient habitats which may function better under climate change conditions. Changes in the climate can influence the timing of when implementation and effectiveness monitoring indicates management objectives have been met but speculations on site-specific ecological, recreational and economic trends are too uncertain for climate change to be a specific resources for analysis by alternative.

The Forest Service Resources Planning Act 2010 Assessment (Future of America's Forest and Rangelands, FS 2010 RPA Assessment (GTR WO-87)) acknowledges and addresses climate change. Rangeland ecosystems typically occur in areas of environmental limitations. The diversity of rangeland ecosystems, the multitude of current stressors, and the potential changes in climate will result in highly diverse responses to climate change across rangeland systems. Effects on forage availability, with consequences to ranch enterprises of livestock, game, or tourism will require flexible, and possibly novel, management to maintain rangeland health and economic viability.

Based on the best available science, it would be too remote and speculative to factor any specific ecological trends or substantial changes in climate into the analysis of environmental impacts of this project. Research about long-range shifts in species range, etc. is ongoing, and a number of

groups are discussing the implications of climate change on forest and range management. Although there is a consensus that global warming is occurring, there is still much uncertainty about subsequent ecological interactions and trends at the local or site-specific scale. Given the stochastic nature of climate-related events such as droughts, wildfire, and floods, it would be highly remote and speculative to make management decisions based on such predictions.

While methane output from cattle is real, project-scale effects will not make individual contributions to greenhouse gas emissions that are significant enough to measure. Methane output is only meaningful at the national level, whether or not cows graze on the Caribou-Targhee NF or elsewhere is not meaningful concerning methane output.

### Minerals and Geology

None of the alternatives would have an impact on mineral and geology resources in the project area. Further information is found in the Geologist Report (2013) in the project file.

### Soil Resources

The indicators used for comparing the effects to soil quality were percent ground cover, presence of erosional features, and approximate extent of soil disturbances related to concentrated livestock use (i.e. stock water developments, corrals, salting locations, and trailing along fences.) Lands where the soil has adequate ground cover are protected from erosion rates in excess of soil loss tolerances that threaten long-term productivity. Ground cover observations, both in the 1960s-1980s and in 2009, are greater than the minimum values identified in the FSH 2209.21 Chapter 20.

Erosional features were noted, and these were limited to old gullies in Walker Creek drainage (field notes, 2014), and a gully in East Mink that was identified in the watershed analysis (Lower Portneuf Watershed Analysis, 2010, p. 184) and repaired in 2010 (Nordic Center Watershed Improvement project). Pedestalling was rare and only identified in one location in South Mink drainage (cite data sheet). Erosional features associated with steep roads and trails that lack drainage are also present in the analysis area, but are not directly related to domestic grazing (Lower Portneuf Watershed Analysis, 2010, p. 111-112, 185).

Detrimental soil disturbances are generally associated with livestock troughs, corrals, salting locations, and somewhat with trailing along fences (Lower Portneuf Watershed Analysis, 2010, p. 187-188). These concentrated use areas commonly have increased soil compaction, which reduces soil quality but is rarely root-limiting; and increased bare ground, often in excess of 40 percent. Soil disturbance decreases rapidly as one moves away from the concentrated use (typically less than 100 ft). Similar soil disturbances are present where frequently-used dispersed camping sites exist in the project area (Lower Portneuf Watershed Analysis, 2010, p. 180).

Further information can be found in the Soil Specialist Report (2014).

### Roadless

The project area includes the West Mink and Scout Mountain roadless areas (FEIS Volume IV Appendix C-35-36). Based on the Revised Forest Plan (FEIS Volume IV Appendix R-92-R94 and R-119-R221) re-evaluation of roadless characteristic, none of the alternatives would impact the roadless area characteristics attributes. Validating Roadless Boundaries was considered beyond the scope of this decision – whether to authorize continued livestock grazing. Further information can be found in the Recreation Specialist's report (2014).

### Air Quality

The project area is in air shed 20 within the State of Idaho from the Montana/Idaho State Air shed Group Smoke Management Plan. Generally, conditions of excellent air quality exist on lands administered by the Forest Service on the Westside Ranger District. All lands within the Forest have been designated as a Class II area as authorized by the 1977 Clean Air Act. None of the alternatives are expected to change air quality conditions.

### Fire/Fuel Management

Historically, fire was an integral and significant disturbance factor within the project area. In the pre-settlement era, wildfires burned under a variety of regimes depending on environmental and site conditions. Currently, fire frequency within the analysis area is outside of reference condition primarily due to two management activities, grazing, and fire suppression. Early grazing levels directly impacted fire frequency on non-forested communities. The impact on non-forested communities by grazing had an indirect impact on forested types; it served as a means of fire control. During the early years of the Forest Service, while permitted grazing limits were at their peak, very little fine fuel was available in the non-forested communities. This kept the fires that did occur small. As permitted animal numbers went down, the range conditions began to improve. Fire suppression techniques also improved. The Forest Service became highly effective at suppressing fire post World War II. So, fires that had been controlled indirectly by the lack of fine fuel could be controlled by the direct will of man. Available records indicate that from 1980 to present approximately 63 wildfires have burned for a total of 3,376 acres of Forest Service land in the analysis area. This represents approximately 1/100 of the acres that could have burned historically in the analysis area (Barret 1994, Forested Vegetation Report 2014). Suppression has affected fire frequency within the analysis area; this has allowed fuels to build-up to higher than normal levels, primarily in forested types. This has shifted the average regime from mixed too high in many areas. If a large fire were to occur within the landscape it could be more severe than in pre-settlement times given the older stand structure and higher fuel loads seen in the project area that have developed since suppression has affected the fire frequency.

Fuel management is outside the scope of this decision. All fires shall be suppressed if they are not in areas covered by a pre-approved Fire Management Plan (RFP 3-4). There is no Fire Management Plan for the project area. The project area is included in the Caribou Targhee National Forest Fire Management Plan. Livestock grazing shall be restricted following prescribed or natural fire and/or rangeland planting or seeding before seed set of the second growing season, or until objective of the treatment are achieved (RFP 3-42).

### Land Use Including Prime Farm, Timber, and Rangelands

According to the definition of Prime Farm, Timber, and Rangeland located in the Forest Service Handbook Chapter 65.21 Department of Agriculture Land Use Policy, the project area does not meet the general, specific, and national criteria (Soil Specialist Report, Forester Report, and Range Specialist Reports).

### Research Natural Areas

Two RNAs are within the Watershed Analysis area include Gibson Jack RNA and the West Fork of Mink Creek RNA. Research Natural Areas may be used only for research, study, observation, monitoring, and those educational activities that maintain unmodified conditions. Unless catastrophic circumstances significantly alter the conditions for which a research natural area was originally created such that it no longer may serve that function, the designation of a research natural area shall be in perpetuity. None of the alternatives would impact the RNA.

### Threatened, and Endangered Plants

There are no threatened or endangered plants in the project area. Ute ladies'-tresses (*Spiranthes diluvialis*) is a federally listed plant species that is known to occur on the Targhee National Forest along the South Fork of the Snake River. Surveys to date have not found the species to occur outside of the floodplain of the Snake River on Forest Service Managed lands in Idaho. No wetland/riparian areas within the allotments are suspected to be occupied by the species based on elevation, habitat conditions, and results of past surveys. There are no effects expected to the species. Refer to Biological Evaluation and Assessment for more detailed information.

## Chapter 2. Alternatives, Including the Proposed Action

### Introduction

This chapter describes and compares the alternatives considered by the Forest Service for the Pocatello/Midnight/Michaud AMP revisions project. It includes a discussion of how alternatives were developed, an overview of mitigation measures, monitoring, and other features of each alternative; a description and map of each alternative considered in detail; and a comparison of these alternatives focusing on the significant issues. Alternative 2 is identified as the preferred alternative. Chapter 2 is intended to present the alternatives in comparative form, sharply defining the issues, and providing a clear basis for choice among options by the decision maker and the public (40 CFR 1502.14).

Some of the information used to compare alternatives at the end of Chapter 2 is summarized from Chapter 4, "Environmental Consequences." This chapter contains the detailed scientific basis for establishing baselines and measuring the potential environmental consequences of each of the alternatives. For a full understanding of the effects of the alternatives, readers will need to consult Chapter 4.

The IDT used information from public scoping, including the significant issues identified for the project (see Chapter 1), and in conjunction with the field-related resource information, to formulate a reasonable range of alternatives. A reasonable range of alternatives to the proposed action was developed to 1) meet the purpose and need for the project, which includes meeting Standards and Guidelines of the Forest Plan, and 2) consider a reasonable range of solutions for the significant issues.

### Alternatives Considered in Detail

The Forest Service developed four alternatives, including the No Action and Proposed Action alternatives, in response to issues raised by the public. The features common to all the alternatives are discussed first and a detailed description of each alternative follows.

#### Features Common to All Alternatives

The ongoing Caribou National Forest Noxious Weed Strategy (USDA, 1996) would continue for each allotment. The strategy provides a systematic approach to noxious weed treatment using chemical, biological, and mechanical means of weed control for the project area. Early detection and treatment are the most cost-effective way to prevent spread of noxious weeds.

Biological Assessments would be prepared as required by the Endangered Species Act (ESA) and agreements with the United States Fish & Wildlife Service. "The potential impacts of this project on species listed as Threatened under the ESA have been discussed with the US Fish and Wildlife Service. There are currently no Threatened, Endangered, or Proposed species occurring within the analysis area. In the future, if a species occurring in the analysis area is listed under ESA, or any new information with regards to the presence of a currently listed species comes to light, consultation with the USFWS would occur. Any required changes to implementation would be included in the term grazing permit" Any changes to listed or proposed species requirements would be modified to the Term Grazing Permit. The occurrence of a wolf, bald eagle, lynx, or a newly listed or proposed species in the project area could alter how livestock are permitted on the allotment.

Municipal watershed fence would be maintained (RPF 4-27).

Develop and implement restoration activities within mules ear monocultures (such as Wyethia dominated site cited LPWA p. 113). (RFP 3-18)

The Caribou Travel Map would be adhered to.

No salt placement along a designated trail or within riparian area.

For any alternative selected, a monitoring plan would be developed using Forest Service Handbook 2209 techniques and protocol, implemented and followed to identify the effectiveness of planned activities. See appendix for monitoring locations in the Allotment Management Plan.

**Implementation monitoring:** This is used to determine if the goals, objectives, standards and guidelines, and practices of the Forest Plan are implemented in accordance with the Forest Plan. This includes short-term monitoring (e.g. Actual use record and forage utilization techniques -Stubble Height, Ocular estimates, and use-mapping).

**Table 2-1 Upland Forage Utilization**

Upland Forage Utilization	Type of Upland Area		
	Critical Winter Range	Winter Range	Non-winter Range
Grass and Herbaceous Species (% dry weight)	35%	45%	55%
Shrubs (% annual leader growth)	10%	20%	35%

**Table 2-2 Riparian Forage Utilization**

Riparian Forage Utilization	Type of Riparian (Lotic) Area		
	Functioning	Functioning-at-Risk	Non-functioning
% Herbaceous Utilization (Greenline)	20-55%	20-45%	20-40%
% Woody Species Utilization	35-50%	30-50%	15-50%
Stubble Height (Greenline)	2-6 inches	3-8 inches	4-8 inches
% Bank Disturbance	25-35%	20-30%	15-25%
% Soil Disturbance	10-15%	10-15%	5-10%

The District would manage stream channels and riparian areas so as to maintain them at or move them toward a Desired Future Condition. Physical assessments, of the stream channel and the associated riparian areas, would be used to determine whether a stream has reached, or is moving toward its' DFC. Measurements such as: percent bank stability, width/depth ratios, channel stability ratings, and Properly Functioning Condition (PFC) assessments would be used to determine the condition of a stream.

**Effectiveness monitoring:** This is used to determine if the Forest Plan Standards and Guidelines, and practices, as designed and implemented are effective in accomplishing the

desired results. This includes long –term monitoring (e.g. nested frequency trend studies, riparian MIM, photo-points, and point ground cover samples).

Management objectives common to all alternatives-

Bank Stability

- Maintain bank stability at or above 80% on those streams/creeks that currently meet this DC.
- Improve bank stability to 80%+ by 2019 on those streams/creeks that have existing stability rating (as of 2010) less than 80% but higher than 60%.
- Improve bank stability to 60%+ by 2019 on those streams/creeks that have existing stability rating (as of 2010) less than 60%; continue to improve bank stability on these streams/creeks to 80% by 2024.

Ecological Status

- Improve ecological status to late seral by 2019 on those streams that are currently rated at mid-seral (as of 2010)
- Improve ecological status to late seral by 2024 on those streams that are currently rated at early-seral (as of 2010)

Site Wetland Ratings

- Reverse downward trend in site wetland ratings by 2019 on those streams/creeks currently rated in fair condition.
- Improve site wetland ratings currently rated in fair condition to good or better condition by 2019.
- Maintain percent substrate fines at less than 25% with no downward trend.

Substrate Fines

- Maintain substrate fines at  $\leq 25\%$  in streams/creeks that currently meet that limit.
- Reduce substrate fines to less than 25% by 2020 for those streams/creeks with fines currently estimated at  $> 40\%$ .

## **Alternative 1**

“No grazing” means that the Forest Service would not reauthorize livestock grazing within the project area (FSH 2209.13 – 92.31). Permitted livestock grazing would be eliminated on the Pocatello, Midnight, and Michaud Allotments. The livestock grazing permits would be cancelled. In accordance with agency regulations (36 CFR 222.4), grazing would cease two years after the notice of cancellation. Current livestock management would continue during that two-year interval.

All livestock-related water developments, waterlines, fences, and other improvements would be evaluated by an interdisciplinary team for removal and restoration needs. Certain infrastructure would remain in place if it is beneficial for other resource management needs (e.g. tribal grazing



rights, recreation or wildlife) and it is not adversely impacting water and riparian resources. Restoration needs and measures would be evaluated on a case-by-case basis.

As documented in FS Agreement 13-MU-110415563-021, Shoshone-Bannock Tribes treaty grazing rights would be available within current RFP designated suitable acres and Forest Plan forage utilization standards (RFP4-62). In order to comply with current Forest Plan suitability determination, the following changes would occur:

- City of Pocatello Municipal Watershed Fence would be moved to protect the entire municipal watershed. Approximately 3-mile of fence would be constructed and existing fence would be removed.
- Unit boundaries fences would be realigned to exclude livestock grazing within Dispersed Camping Management prescription 4.3 (b) of East and South Forks of Mink Creek. All unneeded fences would be removed.

This alternative was developed to respond to the issues and concerns of those who believe that permitted livestock grazing on the National Forest Lands conflicts with other resources to the degree that total elimination of the permitted livestock is needed to adequately resolve conflicts.

The Council on Environmental Quality (CEQ) regulations (40 CFR 1502.14d) require that a "no action" alternative be analyzed in every DEIS. FSH 2209.13 Chapter 90 states: "No action" is synonymous with "no grazing" and means that permitted livestock grazing would not be authorized within the project area.

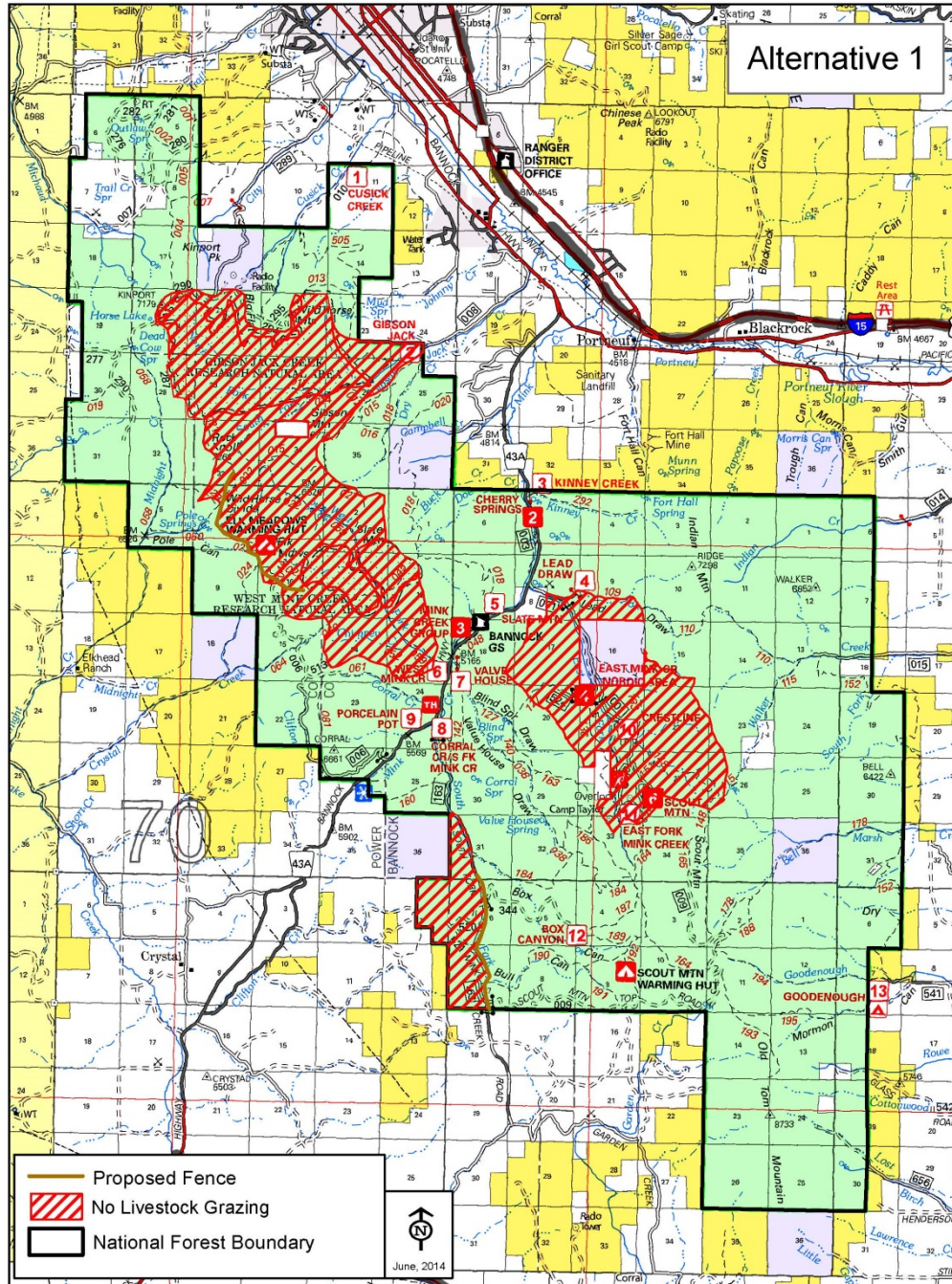


Figure 2-1. Alternative 1.

## Alternative 2

This alternative authorizes livestock grazing to be consistent with the 2003 RFP. The maximum season of use for each allotment would be from May 15 through October 10.

Maximum head months permitted would be 4167 Head Month. Regardless of the grazing system used, no unit would be used first but once in a three year period.

This alternative would exclude grazing from the areas classified as 4.3(b), Dispersed Camping Management Prescription areas as identified in the RFP. This would effectively eliminate livestock grazing within East Fork of Mink Creek, South Fork of Mink Creek, and the vicinity of the Nordic Center. Additionally, livestock would not be allowed to graze within any portion of the area identified as the Municipal Watershed. This would effectively eliminate livestock grazing within Elk Meadows.

In order to achieve the exclusion of livestock grazing from these areas the following actions would be taken:

Pocatello C&H Allotment:

Livestock grazing would not be authorized within Disperse Camping Management Prescription areas 4.3 (b). Unit boundaries fences would be realigned to exclude cattle from the 1,805 acres within the South Fork Mink Creek and 3,676 acres within the East Fork of Mink Creek; unnecessary fences would be removed.

Midnight C&H Allotment

The Municipal Watershed fence that is currently located below the upper boundary of the Watershed boundary would be relocated to enclose the entire watershed. This would require installation of approximately 3 miles of fence. The existing fence would be removed.

The upland and riparian utilization standards outlined in the “Features Common to All Alternatives” section would be applied to control the effect of grazing and enable resource conditions to either be maintained or result in movement toward desired conditions. The utilization standard to manage grazing of key winter shrubs for sharp-tails (serviceberry, chokecherry, hawthorn, aspen, snowberry, and willow) would be limited to 35% percent of the current annual growth.

Adjustments in utilization standards would be initiated based on monitoring, and would be consistent with the direction outlined in the Caribou National Forest Grazing Implementation Guide (RFP 4-52).

The following range structural improvements on the allotments are part of this alternative:

Pocatello C&H Allotment:

Two drift fences would be constructed to limit cattle use along Walker Creek. Bell Marsh drift fence would be reconstructed to create an upper and lower unit. Ten water troughs would be renovated, relocated and/or constructed. See map.

Midnight C&H Allotment

Three water development troughs would be renovated, relocated, and/or constructed. Horse Lakes ponds would be fenced from livestock use.

Michaud C&H Allotment: Trail Creek pipeline and trough would be renovated.

The emphasis of the alternative is to improve livestock management efforts to improve resource conditions while sustaining livestock grazing opportunities and meeting current RFP prescriptions. Timing and intensity of livestock grazing would be the key elements used to implement the utilization standards specified in the Revised Forest Plan.



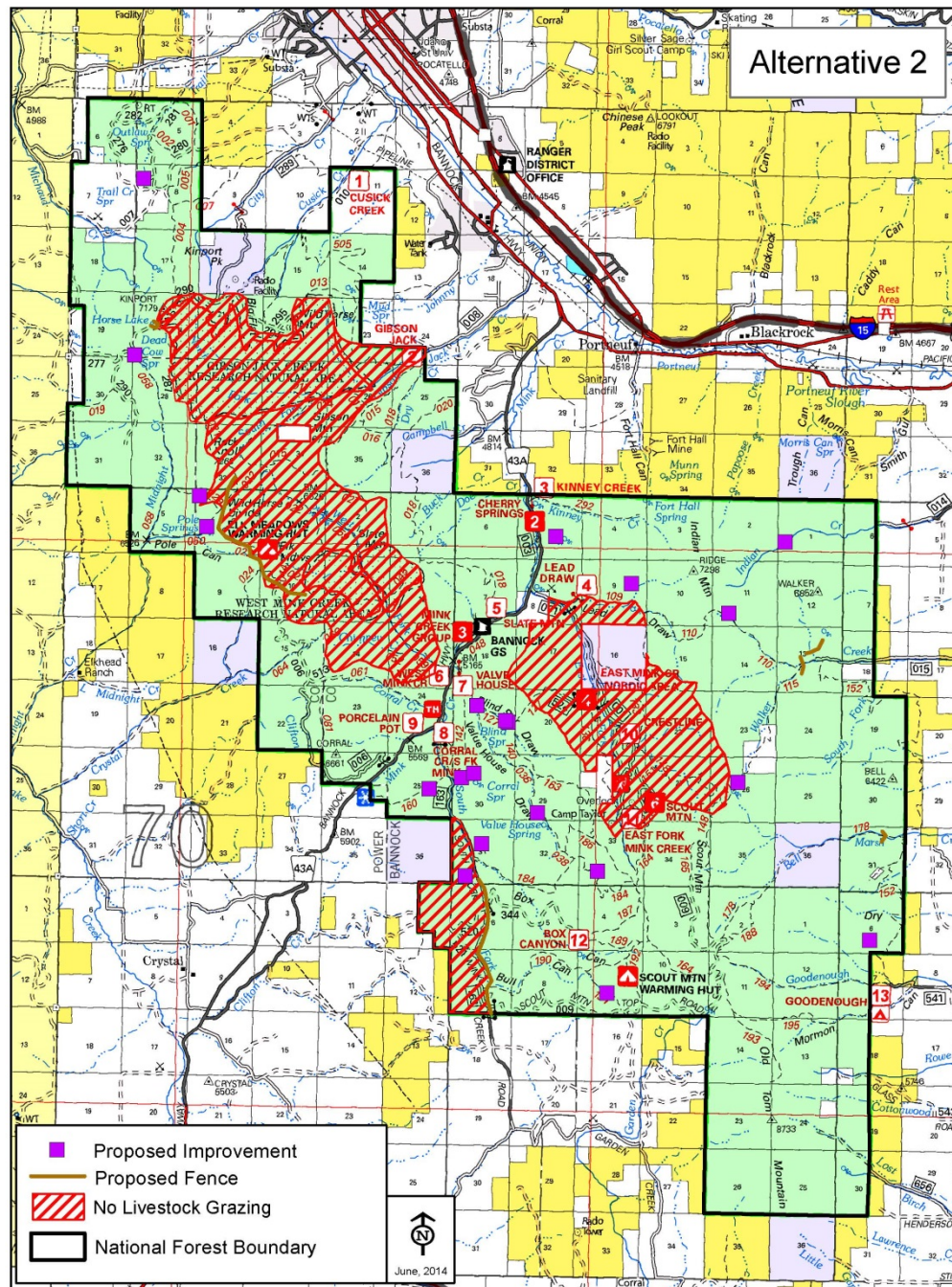


Figure 2-2: Alternative 2.

### Alternative 3:

This alternative was designed to respond to the purpose and need for action described in Chapter 1. Using adaptive management measures, it addresses the following issues: unresolved conflicts with the 4.3(b) Dispersed Camping Management Prescription, and 2.1.3(b) Municipal Watershed

Prescription. The maximum season of use for each allotment would be from May 15 through October 10. Maximum head months permitted would be 5,941. Regardless of the grazing system used, no unit would be used first but once in a three year period.

This alternative would allow livestock grazing from the areas classified as 4.3(b), Dispersed Camping Management Prescription areas as identified in the RFP. Adaptive management measures would be used to reduce the recreation/livestock grazing conflict within East Fork of Mink Creek, South Fork of Mink Creek, and the vicinity of the Nordic Center. Additionally, livestock management measures would be implemented to exclude livestock grazing within any portion of the area identified as the Municipal Watershed.

The following actions would be taken:

**Pocatello C&H Allotment:** A fence would be constructed around the Pine Plantation Dispersed Camping area; approximately 180 acres. This would exclude livestock grazing from the mapped dispersed camping within the South Fork of Mink Creek. Other recreation conflict would be monitored using the adaptive management measures and triggers. Livestock grazing at designated trailheads, on trails, or within established dispersed recreation sites would be excluded by implementing livestock management methods such as herding or salt placement away from the designated trailhead/trail/or camp sites. The following triggers for livestock management include:

- The specific triggers to move the livestock to the next unit or off the Forest would be if physical livestock disturbance exceeds 25 percent (i.e. actual current year cattle sign and soil disturbance of over 1-inch depression). This would be measured along a randomly placed 100-foot transect by District staff. After 5-years of the decision, monitoring data would be review to determine if fencing areas are needed to reduce the conflict. The following were identified as specific area of where cattle congregate conflicts with recreation emphasis prescriptions: Forest Road #002 and 890 (Scout Mountain); the trailheads on Bannock Highway; South Fork of Mink dispersed camp areas and trailheads, Kinney Creek, Valve House, Nordic Ski Area and Crestline Trail.
- Within the Nordic Ski area, the specific triggers to move the livestock to the next unit or off the Forest would be if physical livestock disturbance exceeds 25 percent (i.e. actual current year cattle sign and soil disturbance of over 1-inch depression). This would be measured along a randomly placed 100-foot transect by District staff. After 5-years of the decision, monitoring data would be review to determine if the special use area needs to be fenced.

**Midnight C&H Allotment** livestock grazing would be excluded within the 2.1.3(b) Municipal Watershed Prescription by implementing livestock management methods such as herding, salt placement, fenced water sources and new fence construction within the Elk Meadow area. The trigger to evaluate whether additional livestock management is needed would be if livestock use exceeds 10 percent of herbaceous use within Elk Meadows. The following adaptive management actions would be implemented to exclude livestock grazing within the 2.1.3 (b) prescription:

- First year after the decision, implement livestock management methods such as herding, salt placement, and fenced water sources.
- Three-years after the decision, if monitoring data demonstrate livestock use within Elk Meadow, construct a one-mile drift fence.
- Five-years after the decision, if monitoring data demonstrate livestock use within Elk Meadow, construct a three-mile fence proposed in Alternative 1 and 2 and all legacy fencing would be removed.

The upland and riparian utilization standards outlined in the “Features Common to All Alternatives” section would be applied to control the effect of grazing and enable resource conditions to either be maintained or result in movement toward desired conditions. The utilization standard to manage grazing of key winter shrubs for sharp-tails (serviceberry, chokecherry, hawthorn, aspen, snowberry, and willow) would be limited to 35% percent of the current annual growth.

Adjustments in utilization standards would be initiated based on monitoring, and would be consistent with the direction outlined in the Caribou National Forest Grazing Implementation Guide (RFP 4-52).

The following propose range structural improvement projects are also part of this alternative:

Pocatello C&H Allotment:

Two drift fences would be constructed to limit cattle use along Walker Creek. Bell Marsh drift fence would be reconstructed to create an upper and lower unit. Eleven water troughs would be renovated, relocated and/or constructed. See map.

Midnight C&H Allotment

Three water development troughs would be renovated, relocated, and/or constructed. Horse Lakes ponds would be fenced from livestock use.

Michaud C&H Allotment: Trail Creek pipeline and trough would be renovated.



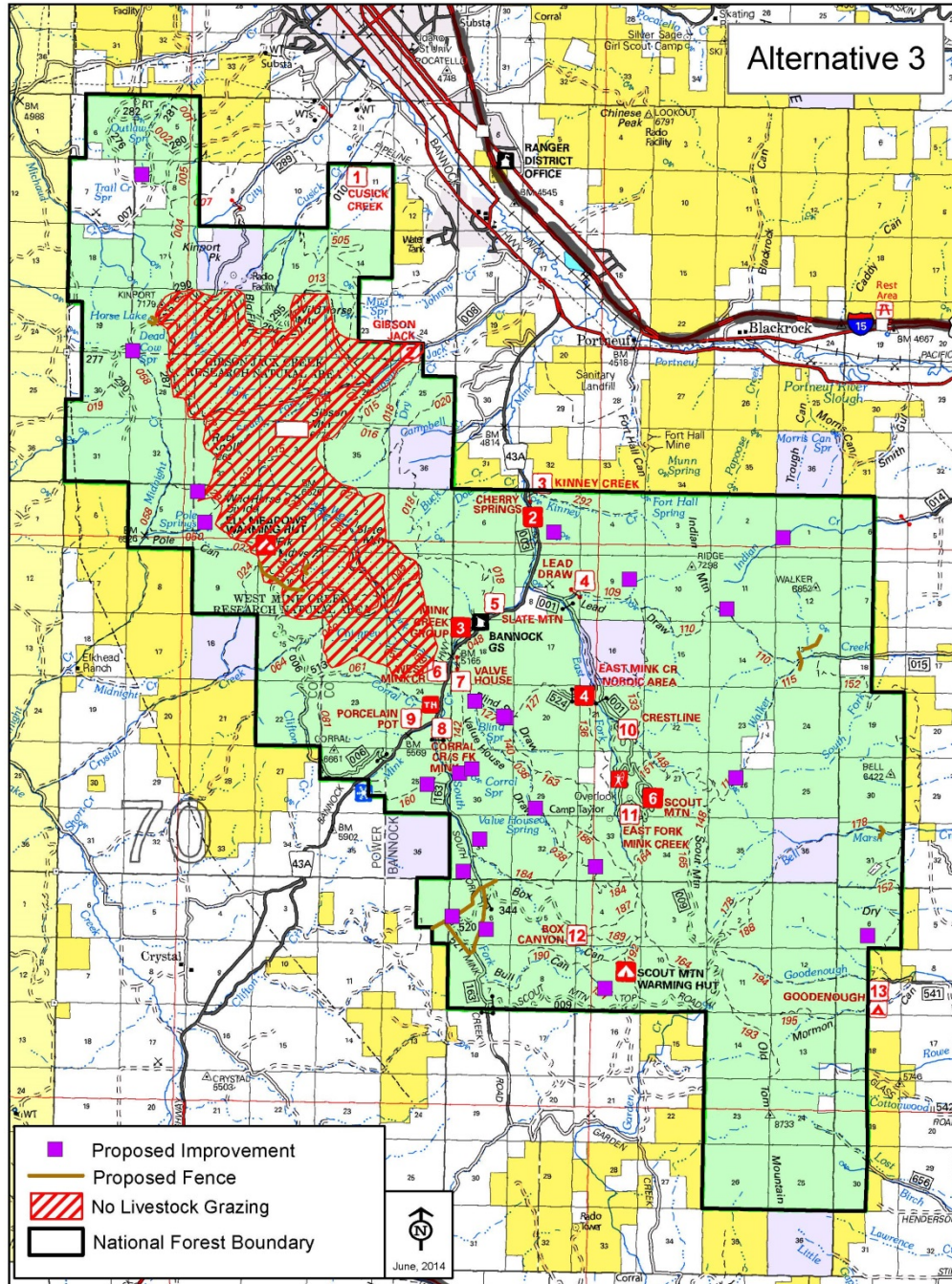


Figure 2-3. Alternative3.

## Alternative 4

This alternative is the same as Alternative 3 with the exception that none of the adaptive management measures identified in Alternative 3 would be implemented and GIG restrictive



riparian management would be implemented. Managers would select the following riparian restrictions:

- Livestock grazing would be rested in riparian areas where monitoring data documented decreasing trends. These areas would remain un-grazed by livestock until there are documented upward trends; this could take up to five years (As described in the GIG for improvement of “all factors”).
- In the Indian, Walker, and Bell Marsh units to avoid impacts to any sharp-tails or broods occurring in the area (due to adjacent known active sharp tail leks), livestock grazing would be limit to 30 days, or until utilization standards are met (whichever occurs first) and to “one year in four” grazing use (GIG Table A)

This alternative would allow livestock grazing within the areas classified as 4.3(b), Dispersed Camping Management Prescription areas as identified in the RFP. Recreation mitigation would be used to reduce the recreation/livestock conflict. Additionally, livestock would not be allowed to graze within any portion of the area identified as the Municipal Watershed. This would effectively eliminate livestock grazing within Elk Meadows.

The following actions would be taken:

Pocatello C&H Allotment:

A fence would be constructed around the Pine Plantation Dispersed Camping area; approximately 180 acres. This would exclude livestock grazing from the mapped dispersed camping occurring within the South Fork of Mink Creek. The following recreation conflict areas would be fence: Forest Road #002 and 890 (Scout Mountain); the trailheads on Bannock Highway; South Fork of Mink dispersed camp areas and trailheads, Kinney Creek, Valve House, Nordic Ski Area and Crestline Trail.

Midnight C&H Allotment

The Municipal Watershed fence that is currently located below the upper boundary of the Watershed boundary would be relocated to enclose the entire watershed. This would require installation of approximately 3 miles of fence. The existing fence would be removed.

This alternative was developed to respond to the issue rapid riparian recovery. It also addresses the water resources, and recreation issues.

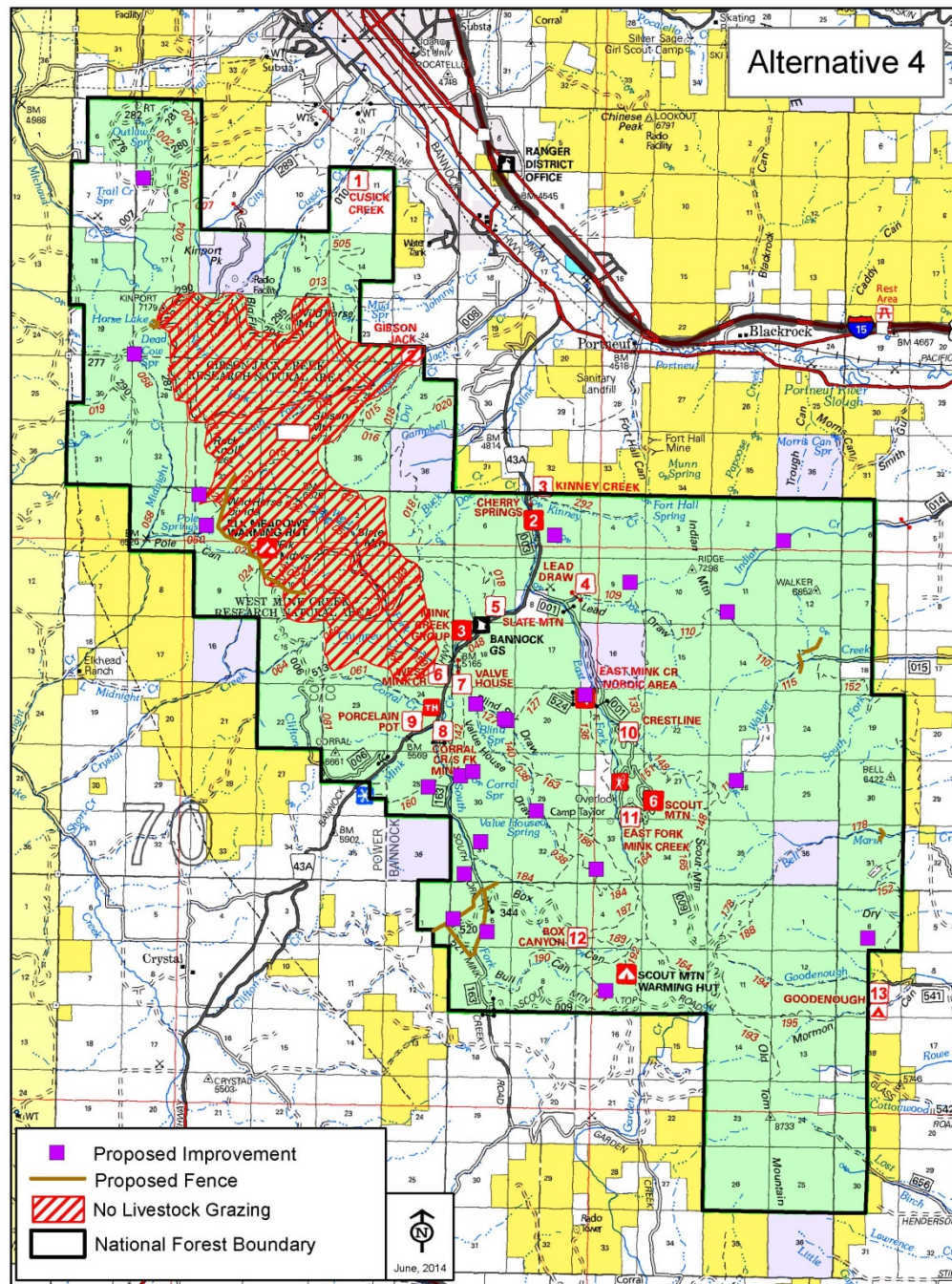


Figure 2-4. Alternative 4

## Alternatives Considered but Eliminated from Detailed Study

Three other alternatives were considered during the planning process, but have not been included in the DEIS for detailed study. According to NEPA (40CFR 1502.14), *rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated*. These are described briefly below, along with the reasons for not considering them further.

### Alternative 5

This alternative is the current livestock management as described in the Annual Operating Plans. Current livestock management is not consistent within the following RFP prescriptions: 2.1.3(b) Municipal Watershed and 4.3(b) Dispersed Camping Management. Also, riparian conditions and water resource and quality are not meeting or moving toward desired conditions in an acceptable timeframe.

### Alternative 6

This alternative responds to specific request from Portneuf Valley Audubon Society (PVAS) received during scoping. PVAS proposed the elimination of all livestock grazing within the Mink Creek Drainage, municipal watershed, and changing allotment boundaries. The following include why Alternative 6 was considered but eliminated from further analysis:

- Alternative 1 eliminates all permitted livestock grazing from the project area. However, it is outside the Forest Service's authority to eliminate tribal livestock grazing from ceded suitable rangeland within the project area. This is beyond the scope of this decision.
- All alternative address the municipal watershed fence location.
- Allotment boundary changes are administrative decision. PVAS's allotment boundaries recommendations will be considered once the decision is made.

### Alternative 7

Alternative 7 responds to specific request from Yellowstone to Uintas Connection (YUC) received during scoping. YUC proposed to close the Pocatello and Midnight Allotment to livestock grazing, eliminate beaver trapping in the Mink Creek Watershed, and active livestock management within the remaining project area (e.g. updating the capacity of the grazed areas; taking into account slope and soil limitations; conservative utilization of 25% in upland and riparian areas; updating livestock forage consumption rates; incorporating rest until plant productivity and vigor is restored after grazing; and actively moving livestock with herding when criteria are met; not relying on passive management; and not grazing during drought years, restore degraded native plant communities and soil cover, provide residual habitat and cover for wildlife). The following include the rationale for dismissal:

- Alternative 1 eliminates all permitted livestock grazing from the project area. However, it is outside the Forest Service's authority to eliminate tribal livestock grazing from ceded suitable rangeland within the project area. This is beyond the scope of this decision.
- Similar to Mule Deer, Elk, and the majority of other wildlife species, hunting, trapping, and/or removal of beaver is permitted and managed by the Idaho

Department of Fish and Game. Specifically, the Mink Creek drainage in Bannock County is part of a controlled Beaver trapping unit, Unit 201 (IDF&G 2014-2015 p. 39). The Forest Service's role in the management of beaver and other wildlife species centers on the management of their habitats. Elimination beaver trapping is beyond the scope of this decision.

- RFP management directions are included for each of the alternatives. This includes suitability and capability validation, and site-specific forage utilization standards using monitoring data and direction from the GIG. The Forest Service focuses its management on the land and vegetation rather than just on livestock needs. Further information is found within the 2008 WO letter to Jon Marvel.
- West Fork of Mink Creek Spring house Restoration and Education program are beyond the scope of this decision.

## Comparison of Alternatives

This section provides a summary of the effects of implementing each alternative. Information in the table is focused on activities and effects where different levels of effects or outputs can be distinguished quantitatively or qualitatively among alternatives.

**Table 2-3. Comparison of Alternatives**

Consequences	Alternative 1	Alternative 2	Alternative 3.	Alternative 4.
<b>Municipal Watershed</b> Acres within the West Fork Mink Creek watershed available to livestock grazing.	0 acres = 0%	0 acres = 0%	Up to 1,711 acres = 38%  Up to 3,368 acres	0 acres = 0%
<b>4.3 (b) Dispersed Camping Management prescription</b> Percent of not suitable acres	5481 acres	5481 acres	180 acres	180 acres
<b>Issue 1.</b> Watershed & Riparian Resources available to grazing  <b>Indicator</b> Acres of AIZ available to livestock grazing.	0 acres if Tribal rights are not exercised.  Up to 2,774 acres if Tribal rights are exercised.	Up to 2,774 acres.	Up to 3,368 acres.	Initially 3,107 acres;  Up to 3,368 acres  Initially rest 261 acres until improved.
<b>Indicator</b> The relative rate of improvement towards DFCs. This indicator is a comparison of alternatives relative to one another (i.e. low, moderate, high rates of improvement).	High if Tribal rights are not exercised.  Moderate if Tribal rights are exercised.	Moderate to High	Low	Moderate overall, but High in those riparian areas with declining trends
<b>Issue 2</b> Vegetation <b>Indicator:</b> Rate of improve condition and trend.  Rate of invasion and spread	On average, ground cover conditions show moderate upward trend toward desired condition (short-term).  Slow rates of change in grazed-induced seral stage.	Light to moderate grazing – expecting increase ground-cover-measurements. Upward trend is expected. Slow rates of change in grazed-induced seral stage. Reduce  Moderate overall effect to	. Light to moderate grazing – expecting increase ground-cover-measurements. Upward trend is expected. Slow rates of change in grazed-induced seral stage.  Moderate overall effect to noxious weeds. 0.07	Light to moderate grazing – expecting increase ground-cover-measurements. Upward trend is expected. Slow rates of change in grazed-induced seral stage.  Moderate overall effect to noxious weeds. 0.07%

Consequences	Alternative 1	Alternative 2	Alternative 3.	Alternative 4.
	Moderate overall effect. Less than 0.005 % increase risk of noxious weed from structural improvements	noxious weeds. 0.07% increase risk of noxious weeds from structural improvements.	increase risk of noxious weeds from structural improvements.	increase risk of noxious weeds from structural improvements
<b>Issue 3</b> Recreation <b>Indicators:</b> Does Alternative meet ROS and VQOs in short-term/long-term? In most or some areas of high recreation use.	This alternative would improve recreation setting and scenery in year 2017 in most heavy-use recreation areas	This alternative would improve recreation setting and scenery in year 2015 in most heavy-use recreation areas.	This alternative would improve recreation setting and scenery in year 2019 in some heavy-use recreation areas	This alternative would improve recreation setting and scenery in year 2015 in many heavy-use recreation areas

## Chapter 3. Affected Environment and Environmental Consequences

### Introduction

This section summarizes the physical, biological, social, and economic environments of the affected project area and is the baseline for the comparisons of Chapter 4. Despite the “affected” in the title, this chapter does not present the effects of the alternatives. This chapter addresses the resources (Issues) in Chapter 1. It also includes other concerns that need to be addressed in this chapter that were not identified by the IDT as issues that affect the decision to be made or developed alternatives to the proposal.

### Water Resources

#### ANALYSIS METHOD:

This analysis used data from the following sources:

- Idaho Department of Environmental Quality’s “Beneficial Use Reconnaissance Project (BURP)” surveys.
- Integrity, Watershed Vulnerability and Aquatic Biotic Information (IWWI 1998).
- Forest Service evaluations including stream classification (Rosgen, 1996), channel stability surveys (Properly Functioning Condition (PFC) assessments (Prichard 1993). These surveys evaluated the entire length of all discussed streams (on National Forest System Lands) by the Caribou/Targhee Forest Hydrologist. Multiple Indicator Monitoring (Technical Reference 1737-23 2011) method was used.

#### ANALYSIS AREA:

The hydrology and fisheries/aquatic analysis area are the sixth-level hydrologic unit code (HUC) watersheds clipped to the analysis allotments. The livestock grazing effects will be discussed at multiple scales, including the stream reach, allotment, and watershed level scales. Some downstream effects (e.g. water quality) will also be discussed outside of the analysis area.

The hydrologist used stream classification to divide streams into relatively similar units that behave in a predictable manner. These units, along with knowledge of how similar stream types responded to similar activities, were then used to determine a stream’s sensitivity to future disturbances. The channel stability assessments evaluated three portions of the channel; the upper banks, lower banks, and stream bottom. This allowed the analyst to determine stream sensitivity based upon the stream’s current condition. Finally the PFC assessment evaluated channel and riparian processes. The use of these three methods increased the likelihood that a reach’s sensitivity was accurately determined. For more detail, please refer to the Hydrologist Report (2014).

**State Water Quality Standards and Best Management Practices (BMPs):** The Idaho Department of Environmental Quality (IDEQ) identifies surface water use designations (i.e. beneficial uses) and water quality standards (IDEQ 2014). **Table3- 1** lists the beneficial uses of waterbodies within analysis allotments as well as those immediately downstream.

**Table3- 1: Beneficial uses of waterbodies throughout the analysis area (IDEQ 2014).**

<b>Waters within Allotments</b>	<b>Beneficial Uses</b>
Mink, Indian, Walker, Bell Marsh, Goodenough, Garden, Rattlesnake, Clifton, Midnight, Michaud Creeks, & all other small or unnamed streams.	Coldwater Aquatic Life, Primary Contact Recreation, Agricultural and Industrial Water Supply, Wildlife Habitats, and Aesthetics - Protected for all recreational uses and the propagation of fish, shellfish, and wildlife, wherever attainable.
<b>Waters downstream of Allotments</b>	<b>Beneficial Uses</b>
American Falls Reservoir	Coldwater Aquatic Life, Primary Contact Recreation, Domestic, Agricultural and Industrial Water Supply, Wildlife Habitats, & Aesthetics
Marsh Creek and Bannock Creek	Coldwater Aquatic Life, Secondary Contact Recreation, Agricultural and Industrial Water Supply, Wildlife Habitats, and Aesthetics
Portneuf River (Marsh Creek to American Falls Reservoir)	Coldwater Aquatic Life, Salmonid Spawning, Secondary Contact Recreation, Agricultural and Industrial Water Supply, Wildlife Habitats, and Aesthetics

Through a Memorandum of Understanding (MOU) with the State of Idaho, the Forest is responsible for implementing nonpoint source pollution control measures during all management activities (USDA FS 2008). The Idaho anti-degradation policy pronounces that the designated uses and the level of water quality necessary to protect those uses shall be maintained and protected (IDEQ 2014). It is also Forest Service Policy to maintain or improve water quality (Caribou NF RFP and FSM 2500<sup>1</sup> (2520.3)). The State recognizes BMPs as an effective process for protecting beneficial uses and ambient water quality.

#### **Impaired Waters (303(d) Listed), Total Maximum Daily Loads (TMDLs), & BMPs:**

The IDEQ has identified several water quality assessment units (AUs) in the allotments that do not meet the water quality standards for the specified beneficial uses (i.e. impaired waters). Section 303(d) of the federal Clean Water Act requires the State to develop TMDLs for impaired waters. A TMDL identifies pollutant level limitations with the goal of improving water quality in order for waterbodies to once again support beneficial uses. Several AUs in the area are either 303(d) listed and/or have an established TMDL.

The analysis area overlaps portions of two subbasins: 1) Portneuf River and 2) American Falls. The IDEQ recently revised the Portneuf River TMDL (Ray 2010) and the American Falls TMDL (IDEQ et al. 2012). Idaho's 2010 Integrated Report (IDEQ 2011) and Draft 2012 Integrated Report (IDEQ 2013) also provide water quality information. Table 3- 2 and **Error! Reference source not found.** Summarize the TMDL and 303(d) (i.e. water quality impaired) information from the TMDLs and integrated reports.

On National Forest System (NFS) lands within the Portneuf River Subbasin, TMDLs were developed for sediment/total suspended solids (TSS), total phosphorus (TP), bacteria (*E. coli*), and total nitrogen (TN). The load allocations are based on the following target concentrations:

- TSS: Less than 35 mg/L (low flow) and 80 mg/L (high flow)
- TP: Less than 0.07 mg/L (low flow) and 0.125 mg/L (high flow)
- E. coli: Not to exceed monthly geometric mean (minimum of five samples) of 126 *E. coli* organisms/100 ml of water (State Water Quality Standard).
- TN: Less than 1.0 mg/L for tributaries to the Portneuf River

<sup>1</sup> Section 2520.3 of FSM 2500 states: "Apply management practices that meet requirements for protecting, maintaining, restoring, or improving watershed conditions."

Through a MOU with the State of Idaho (USDA FS 2008), the U.S. Forest Service is the designated agency for NFS Lands. The Forest will revise its Portneuf River TMDL Implementation Plan (IDEQ 2003) to include the recommendations of the Lower Portneuf Watershed Analysis (Caribou-Targhee NF 2010) and this EIS. Accordingly, the Forest will ensure that BMPs are properly implemented to protect and improve water quality. The BMPs and Caribou Riparian GIG (Leffert 2005) provide additional protection for streams with TMDLs



and 303(d) listings through more stringent riparian use standards.

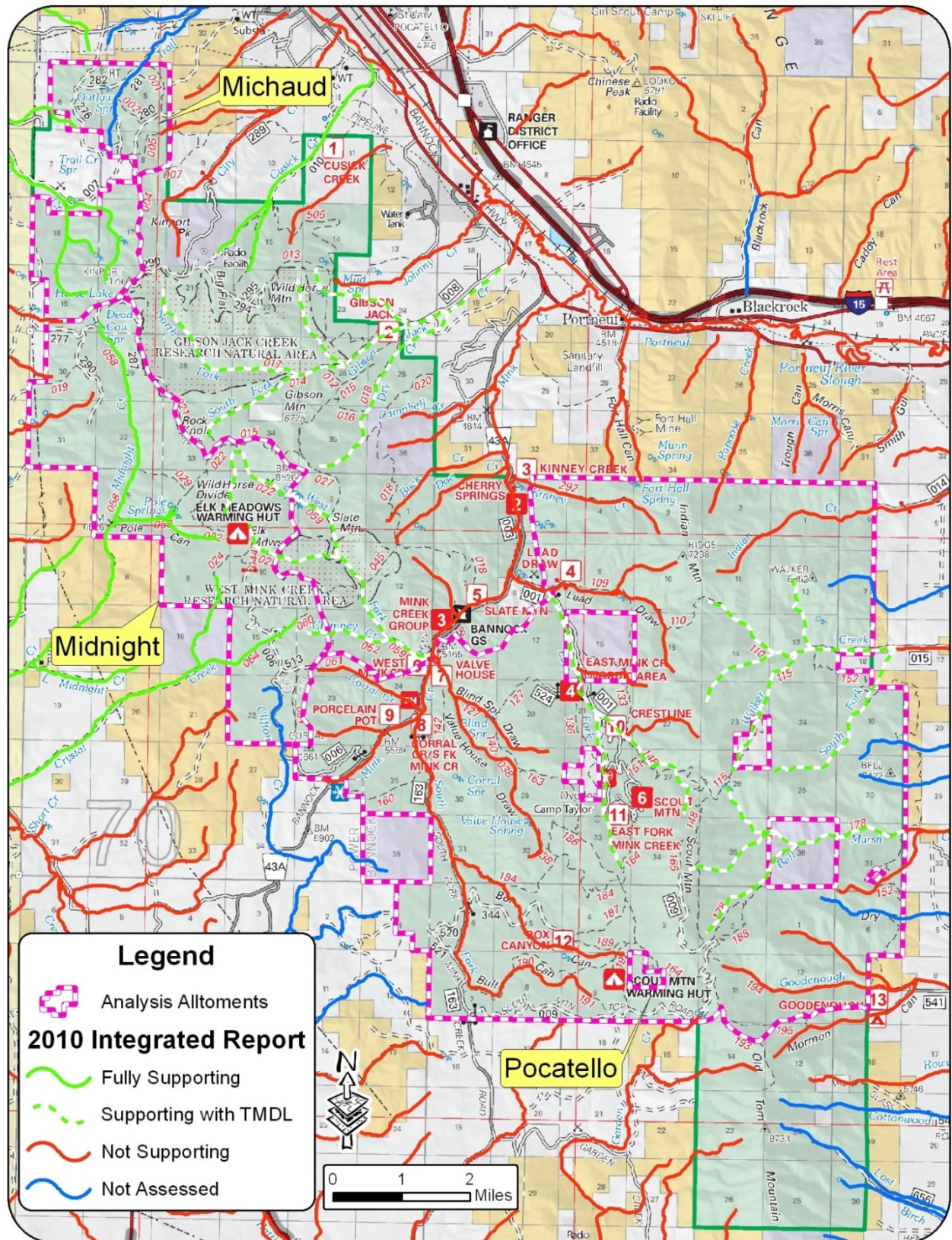


Figure 3-1: 2010 integrated report

**Table 3- 2: Water quality summary for NFS lands (IDEQ et al. 2012, IDEQ 2011 & 2013, & Ray 2010).**

Assessment Unit & Relevant Streams	Beneficial Uses Support <sup>1</sup>	303(d) and/or TMDL comments	Allotments
<sup>1</sup> – CWAL = cold-water aquatic life; SS = salmonid spawning; PCR & SCR = primary & secondary contact recreation.			
ID17040206SK002_02: Bannock Creek – Birch Creek	Not Supporting CWAL & PCR	303(d) listed for fecal Coliform (E. coli) & sediment. Nutrients also suspected.	Midnight Michaud
ID17040206SK010_02a: Crystal Creek	Fully Supporting CWAL & SS		Midnight
ID17040206SK011_02: Clifton Creek	Not Assessed		Midnight
ID17040206SK012_02: Midnight Creek	Fully Supporting CWAL & SCR		Midnight
ID17040206SK013_02: Michaud Creek	Fully Supporting CWAL, SS, & SCR		Michaud
ID17040208SK001_02: Portneuf tributaries-Marsh Creek to American Falls – Fort Hall Canyon	Not Supporting CWAL	EPA approved TMDLs for Nitrogen, Oil & Grease, Phosphorus, & Sediment.	Pocatello
ID17040208SK001_02b: Trail Creek	Not Assessed	N/A	Michaud
ID17040208SK001_02c: Papoose Creek	Fully Supporting CWAL. Not Supporting SCR.	303(d) listed and Draft TMDL for E. coli.	Pocatello
ID17040208SK002_02: City Creek	Fully Supporting CWAL & SCR	N/A	Pocatello
ID17040208SK004_02: Mink Creek Tributaries- source to mouth - Valve House Draw, Buck, Doe, & Corral Creek	Not Supporting CWAL	EPA approved TMDLs for Nitrogen, Phosphorus, & Sediment.	Pocatello
ID17040208SK004_02a: Kinney Creek	Not Supporting CWAL	EPA approved TMDLs for Nitrogen, Phosphorus, & Sediment.	Pocatello
ID17040208SK004_02b: West Fork Mink Creek	Fully Supporting SS, SCR. Supporting CWAL* (see comment).	*EPA approved TMDLs for sediment, nitrogen, and phosphorus (officially listed as not supporting CWAL). Although this AU supports CWAL, it was included in the Portneuf River TMDLs. If this AU continues to support beneficial uses, it will be moved to “fully supporting” in ensuing reporting cycles.	Midnight
ID17040208SK004_02c: South Fork Mink Creek	Fully Supporting SS. Supporting CWAL* (see comment). Not Supporting SCR.	303(d) listed and Draft TMDL for E. coli. *EPA approved TMDLs for sediment, nitrogen, and phosphorus (officially listed as not supporting CWAL). Although this AU supports CWAL, it was included in the Portneuf River TMDLs. If this AU continues to support beneficial uses, it will be moved to “fully supporting” in ensuing reporting cycles.	Pocatello
ID17040208SK004_02d: Upper East Fork Mink Creek	Fully Supporting SS. Supporting CWAL* (see comment).	*EPA approved TMDLs for sediment, nitrogen, and phosphorus (officially listed as not supporting CWAL). Although this AU supports CWAL, it was included in the Portneuf River TMDLs. If this AU continues to support beneficial uses, it will be moved to “fully supporting” in ensuing reporting cycles.	Pocatello

Assessment Unit & Relevant Streams	Beneficial Uses Support <sup>1</sup>	303(d) and/or TMDL comments	Allotments
<sup>1</sup> – CWAL = cold-water aquatic life; SS = salmonid spawning; PCR & SCR = primary & secondary contact recreation.			
ID17040208SK004_03: Lower East Fork Mink Creek	Not Supporting CWAL	EPA approved TMDLs for sediment, nitrogen, and phosphorus.	Pocatello
ID17040208SK004_03a Mink Creek - Mink Creek Between East & South Forks	Not Supporting CWAL	EPA approved TMDLs for sediment, nitrogen, and phosphorus.	Pocatello
ID17040208SK005_02 Indian Creek	Fully Supporting CWAL. Not Supporting SCR.	303(d) listed and Draft TMDL for E. coli.	Pocatello
ID17040208SK007_02a Upper Walker Creek - South Fork Walker Creek	Fully Supporting SS. Supporting CWAL* (see comment).	*EPA approved TMDL for sediment (officially listed as not supporting CWAL). Although this AU supports CWAL, it was included in the Portneuf River TMDLs. If this AU continues to support beneficial uses, it will be moved to “fully supporting” in ensuing reporting cycles.	Pocatello
ID17040208SK008_02 Bell Marsh Creek Tributary - Southern Tributary	Not Supporting CWAL	EPA approved TMDLs for sediment, nitrogen, and phosphorus.	Pocatello
ID17040208SK008_02a Upper Bell Marsh Creek	Fully Supporting SS, SCR. Supporting CWAL* (see comment).	*EPA approved TMDLs for sediment, nitrogen, and phosphorus (officially listed as not supporting CWAL). Although this AU supports CWAL, it was included in the Portneuf River TMDLs. If this AU continues to support beneficial uses, it will be moved to “fully supporting” in ensuing reporting cycles.	Pocatello
ID17040208SK008_02b Lower Bell Marsh Creek	Fully Supporting SCR. Not Supporting CWAL	EPA approved TMDLs for sediment, nitrogen, and phosphorus (officially listed as not supporting CWAL).	Pocatello
ID17040208SK009_02a Upper Goodenough Creek - Goodenough Creek & Mormon Canyon	Fully Supporting SCR. Not Supporting CWAL.	EPA approved TMDL for sediment.	Pocatello
ID17040208SK010_02a Upper Garden Creek – headwaters to Garden Creek Gap	Not Supporting SCR. Fully Supporting SS. Supporting CWAL with a TMDL* (see comment)	303(d) listed and Draft TMDL for E. coli. *EPA approved TMDLs for sediment, nitrogen, and phosphorus (officially listed as not supporting CWAL). Although this AU supports CWAL, it was included in the Portneuf River TMDLs. If this AU continues to support beneficial uses, it will be moved to “fully supporting” in ensuing reporting cycles.	Pocatello

**Proper Functioning Condition (PFC) Assessments:** PFC is a qualitative method for assessing the condition of riparian-wetland areas (USDI BLM et al. 1998 & 2003). Possible assessment ratings include: PFC, functioning at risk (FAR), and non-functioning. The minimum goal is for stream channels to be PFC. The Forest determined PFC ratings for streams in 2001 as part of the RFP efforts. More recent field assessments have been completed portions of the streams. **Error! Reference source not found.** Summarizes both the 2001 and more recent data, while Table 3- 3 summarizes the more recent PFC data, while. The Forest uses PFC assessment data in the following ways:

- 1) As a large scale inventory of resources conditions.



- 2) To help identify the proper riparian-grazing use standards (Leffert 2005).
- 3) To identify areas where more detailed quantitative monitoring may be necessary.

**Table 3- 3: Field PFC ratings for streams throughout the analysis area.**

Unit	Streams	PFC Rating & Year
<b>Pocatello Allotment</b>		
Walker Creek	Walker Creek	FAR (2009): B4 stream type. Lacks herbaceous vegetation.
Walker Creek	South (Left) Fork Walker	PFC (2009): B3 stream type.
Lead Draw	Kinney Creek	FAR (2007): Channel widening and high amount of bank shear/trampling. Lacks herbaceous hydric vegetation ( <i>Carex/Juncus</i> ). No apparent trend.
Lower Cow Camp	East Fork Mink Creek	FAR (2007): Downward trend noted in 2007 due to heavy recreation and camping use. Work has been done since 2007 to prohibit motorized access. The trend is now upwards.
Upper Cow Camp	East Fork Mink Creek	PFC (2007): Stable beaver activity. Lacking young woody species.
Catch	South Fork Mink Creek	FAR (2009): B and E stream types. Active, but poor stability beaver dams. Poor recruitment of woody species, lacking hydric herbaceous.
Highway	South Fork Mink Creek	PFC (2009): B4 stream type. Very active beaver dams.
Unit 6	South Fork Mink Creek	FAR (2012): High width/depth in areas. Incised, but not entrenched. Bank sloughing at bend. Road parallels stream.
<b>Midnight Allotment</b>		
Midnight	Midnight Creek	PFC (2009): B3/B4 Stream types.
Crystal Creek	Crystal Creek: 1. Upper reach 2. Lower reach	FAR (2009): Over-widened. Upland plants, lack hydric plants. Recommend bank trampling as grazing standard. 1. Noted upward trend, but MIM data since 2009 suggests a downward trend. 2. B4 stream type. Downward trend due to ATV trail running through stream causing sediment inputs. Relocate trail.
<b>Michaud Allotment</b>		
Michaud	South/Right Fork Michaud Creek	FAR (2009) due to road, upstream of road is PFC: A stream type in upper reach; B stream type in lower reach; overall Ba3/4. Road impacts stream where it is in close proximity (sediment & runoff inputs). Lacks herbaceous riparian. Need to close road.

**Multiple Indicator Monitoring (MIM):** MIM (Burton et al. 2011) is performed at riparian designated monitoring areas (DMAs) to assess:

1. Short-term (i.e. annual) livestock use of riparian areas. The Forest uses this data to determine if that year's livestock grazing is meeting the grazing use criteria/standards. The annual use data, from both MIM and other protocols, are discussed in the next section and shown in Table 6.
2. Long-term resource conditions. The Forest uses this data to determine the current condition and trend of streambanks, stream channels, and streamside vegetation. Trend can be determined if repeated measurements have been completed over time. This data helps us determine in our grazing management is sustaining progress towards our long-term goals, DFCs, and objectives.

Long-Term Indicators: **Error! Reference source not found.** Summarizes the long-term indicators for the riparian DMAs in the analysis area. Trend can be evaluated at the South Fork Mink Creek DMA in the Catch Unit, the Crystal Creek DMA, the Walker Creek DMA, The Indian Creek DMA, and the Kinney Creek DMA; these are the only DMA with repeated measurements. To better understand the trend across the analysis area, I recommend that all the DMAs be re-evaluated at the end of the grazing season in 2014.

**Groundwater Dependent Ecosystems (GDE) Inventory (seeps and springs):** A partial GDE inventory (USDA FS 2012a) was completed at forty sites. The partial inventory included photographs and noting disturbances at the sites. The disturbances noted at GDE sites are summarized in Table and Figure 3-. The Forest identified areas where livestock grazing has degraded GDEs. Those sites, and the actions required to improve them, are listed in the watershed inventory needs BMP for the action alternatives.

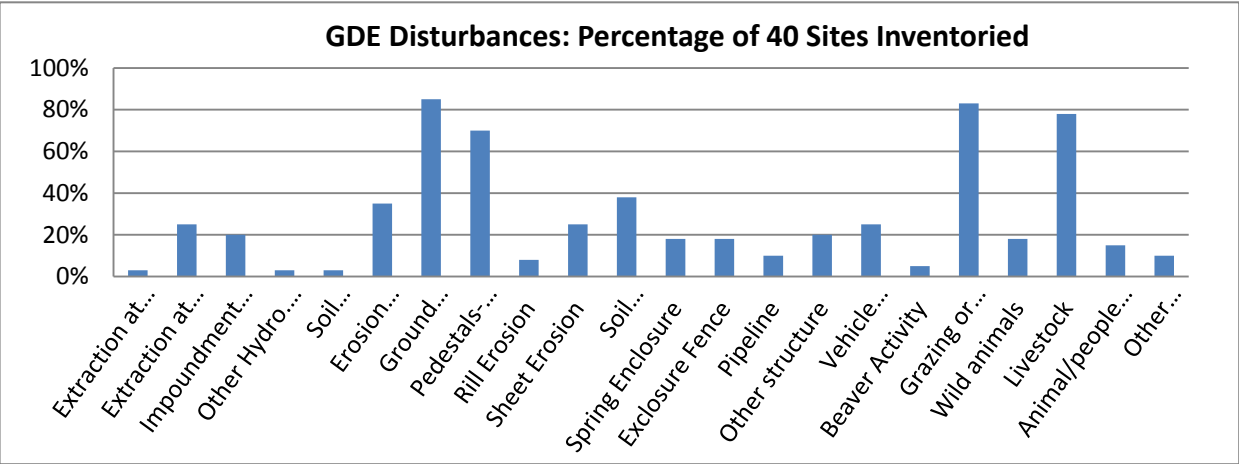
**Photographic Monitoring:** Photographic monitoring provides a way to evaluate changes. This type of monitoring has been done through the allotments. Most recently, the District completed a photo inventory of many seeps and springs throughout the project area.

**Table 3-4: GDE disturbance summary.**

Disturbance*	Number of Sites Out of 40	Percentage of Sites
Extraction of water within a wetland	1	3%
Extraction of water at spring source	10	25%
Regulated water flow by impoundment/dam	8	20%
Other Hydrologic Alteration	1	3%
Soil Displacement	1	3%
Erosion (general)	14	35%
Ground Disturbance (general)	34	85%
Pedestals or hummocks (by people or animals)	28	70%
Rill Erosion	3	8%
Sheet Erosion	10	25%
Soil mixing/churning	15	38%
Enclosure (such as spring house, spring box or concrete enclosure)	7	18%
Exclosure Fence	7	18%
Pipeline	4	10%
Other structure-related disturbances	8	20%
Tracks or trails by vehicles (ATV, 4-wheel drive, etc.)	10	25%
Beaver Activity	2	5%
Grazing or browsing (by ungulates)	33	83%
Wild animals	7	18%
Livestock	31	78%
Trails by animals and people	6	15%
Misc. other disturbances	4	10%

\*The following disturbances were not noted at any sites: permanent water diversion, water diversion (with eventual return to site), up-gradient extraction of surface or ground water, down-gradient capture of surface or ground water, pollution, flooding, wells, channel erosion, compaction, debris flow, deposition, evaporate deposition, excavation, gully erosion, mass wasting, mining, pedestals (small-scale), pipes, vehicle ruts, slump, splash erosion/soil crust, wind erosion, soil/peat removal, buried utility corridors, erosion control structure, oil and gas well, point source pollution, power lines, road, campsites, feral animals, fire, tree cutting/timber harvest, or refuse disposal.

Figure 3-2: GDE disturbance summary.



**Yellowstone Cutthroat Trout:** Yellowstone cutthroat trout (YCT), a Regional Forester’s Sensitive species, occurs in the project area. U.S. Fish and Wildlife Service were petitioned to list Yellowstone cutthroat trout in August 1998. In February 2001, the agency finalized their finding on the petition to list Yellowstone cutthroat trout. They indicated the petition did not provide substantial information to indicate listing was warranted. On January 21, 2004, the original petitioners filed suit in federal court challenging the U.S. Fish and Wildlife Service’s negative 90-day finding. Yellowstone cutthroat trout currently retains its status as a Sensitive species on the Regional Foresters Sensitive Species List.

The analysis area overlaps the historic distributon of Yellowstone cutthroat trout which would have been the native salmonid found within the Portnuef River, Marsh Creek, and Bannock Creek and their associated tributaries. The current distribution of YCT is now mostly confined to tributaries of these waters due to anthropomorphic changes that have altered water quality, aquatic habitat, and connectivity of these larger systems.

Within the planning area, Yellowstone cutthroat trout are found in many of the perennial waters that have adequate stream flows (Table 3). YCT dominate the salmonid communities in the South Fork Mink, Walker, Bell Marsh and Goodenough creeks. YCT are also present in the mainstem of Mink Creek and in the East Fork Mink Creek. However populations in these drainages are in decline due to the presence of non-native brook and brown trout. These non-native fish have proven effective at out-competing and displacing native cutthroat trout.

Other named tributaries in the analysis area including Indian, South Fork Walker, Midnight, Crystal, Clifton, and Michaud creeks are considered non-fish bearing on the Forest. The Forest contains the headwaters of these tributaries, with some having multiple forks that lack significant stream flows to support a fishery in the analysis area. However many of these tributaries support a fishery below the Forest boundary on adjacent public and private lands. YCT have been sampled on Bureau of Land Management (BLM) land on both Crystal and Midnight creeks (Table 3). There are no fish sampling records for Clifton and Michaud creeks. It is assumend that Michaud Creek, below the forks located on the Forest, has the potential to support a fishery. Further investigation is needed to confirm this assumption.

Table 3-5. Summary of fisheries distribution data for streams within the analysis area.

Allotment	Stream	Sensitive Fish Present	Fish Species Present	Sampler and Date
Pocatello C&H	Mink Creek	Yes	YCT, BRN, RBT, HYB, SC	IDFG 1991 and 2000, CTNF 2001
	SF Mink Creek	Yes	YCT	IDFG 2006, CTNF 2001 and 2011
	EF Mink Creek	Yes	YCT, BRK, SC	CTNF 2001
	Indian Creek	No	None	CTNF 2001
	Walker Creek	Yes	YCT	CTNF 2001 and 2011
	SF Walker Creek	No	None	CTNF 2001
	Bell Marsh Creek	Yes	YCT	CTNF 2001 and 2011
	Goodenough Creek	Yes	YCT	CTNF 1999 and 2010
Midnight C&H	Midnight Creek	Yes	YCT, SC	Meyer 2000, BLM 2000, CTNF 2001
	Crystal Creek	Yes	YCT, SC	Meyer 2000, BLM 2000, CTNF 2001
	Clifton Creek	Unknown	Unknown	
Michaud C&H	Michaud Creek	Unknown	Unknown	

**Fish species abbreviations;** YCT: Yellowstone cutthroat trout, BRN: brown trout, BRK: brook trout, RBT: rainbow trout, HYB: hybrid rainbow x cutthroat, SC: sculpin sp. **Sampler abbreviations;** Meyer: Meyer and Lamansky 2004, IDFG: Idaho Department of Fish and Game, BLM: Bureau of Land Management, CTNF: Caribou-Targhee National Forest

Factors currently affecting Yellowstone cutthroat trout in the analysis area include isolation from other populations, competition and predation from non-native fish, genetic introgression with rainbow trout, off-road vehicle use in and near streams, dispersed camping in riparian areas, road and trail encroachment upon streams, road maintenance, wildfire, and grazing.

## Rangeland Health

### ANALYSIS METHOD:

This analysis used data from the following sources:

- Aerial photo interpretation
- Properly functioning condition assessments (USDI, 1993), line intercept transects, and range inspections, long-term trend studies, riparian trend studies, Daubermire trend studies and nested frequency trend studies. Other than the properly functioning condition evaluation, the Forest Service Handbook 2209.20 describes the methodology and protocol used. Stand Exam Data, Range analysis, and grazing capacity forms (1960-1980) were used as baseline data. These studies and field visit notes are available as part of the project record and available at the Westside Ranger District Office.
- Vegetation Specialists reviewed and evaluated the data using the rangeland health indicators as described in FSH 2209.20 and referenced in Indicators of Rangeland Health and Functionality in the Intermountain West (RMRS-GTR-104 2003).
- Brush species canopy cover was estimated from the “Mid-level Vegetation Classification and Mapping”. For further information, please refer to “Mid-level Vegetation Classification and Mapping “(2014).
- Site-specific historical Actual Use, range improvement projects (non-structural treatments and structural improvements) were compiled from the available records.
- The location and determination of the noxious weed infestations within the project area was

determined from an intensive review of the District's past chemical application and biological release records, and mapping efforts from the Highland CWMA (Cooperative Weed Management Area).

- Soil Report produced for this NEPA analysis project. Soil resource concerns as they related to vegetation have been incorporated here under vegetation as a resource concern as appropriate. Soil and vegetation resource concerns are almost always interrelated.

## ANALYSIS AREA:

The analysis area is the project area. The scope of this project effects the vegetation within the allotments. Only vegetation within the analysis area would be impacted by the proposed actions (livestock grazing and connected actions).

**Existing Condition:** Within the project area, there is approximately 22 percent conifer (Douglas fir, limber pine/Douglas-fir, and spruce/fir), 42 percent shrubland, 24 percent aspen, 11 percent woodland (maple, juniper and mountain mahogany), less than 1 percent herbaceous, and less than one percent riparian.

Approximately one-quarter of the analysis area can be characterized as forested vegetation and can best be described as being dominated by the Douglas-fir cover type. Forested areas within the analysis area are primarily Douglas-fir and quaking aspen. Spruce/Fir and Conifer Mix stands are less common, mostly restricted to the higher elevations. Vegetation structure is dominated by mature/old vegetation across the project area. The majority of conifer acres are dominated by the larger size classes while deciduous structure is dominated by the smaller size class. These cover types are described in detail within the Forested Vegetation Specialist Report (2014). During scoping, aspen health/decline was raised as a concern. Specifically, that browsing by domestic ungulates was contributing to the decline of aspen on the district. Aspen has a downward trend (i.e. numbers are decreasing) in all cover types within the project area. Aspen historically has been a seral component in many stands in the project area. The importance of Aspen on the landscape and the role of the lack of fire disturbance in the decline of aspen are well described in the Portneuf Watershed Assessment (USDA-FS 2010b). The decline of aspen within the analysis area can be attributed to several factors including the conversion of aspen to conifer due to a lack of disturbance (primarily fire), and impacts to aspen stands resulting from livestock grazing (USDA-FS 2010b p. 158, p. 186-187 with pictures showing better aspen regeneration within exclosures). Livestock tend to congregate in Aspen stands, especially in riparian areas, potentially resulting in overuse of suckers and excessive trampling in the stand. However, recent monitoring demonstrates adequate regeneration of aspen seeding (Forester report 2014). The RFP provides direction to address imbalance in conifer structure classes and the decline of aspen, with the use of prescribed fire and mechanical treatment activities (RFP 3-18 to 3-20). In addition to these restoration activities the plan also directs the District to provide goods and services within the productive capacity of the land (i.e. timber sales) from lands in the "5.2 Forest Vegetation Management" prescription (RFP 4-71 to 4-74).

Approximately twenty-one percent of shrub land types on the project area are mapped as mountain big sagebrush (*Artemisia tridentata ssp. vaseyana*). Dwarf sagebrush types (*Artemisia arbuscula* & *Artemisia nova*), subalpine sagebrush, (*Artemisia spiciformis*), and basin big sagebrush (*Artemisia tridentata*) are found less frequently. Mountain snowberry (*Symphoricarpos oreophilus*) and antelope bitterbrush (*Purshia tridentata*) are also well represented and sometimes co-dominant within both the mountain and sagebrush types. They form a medium shrub layer 2 to 3 feet tall. The understory consists of perennial grasses, along with a large number of perennial forbs. The principal grasses include bluebunch wheatgrass



(*Pseudoroegneria spicata*), mountain brome (*Bromus marginatus*), slender wheatgrass (*Elymus trahycaulum*), and bluegrasses (e.g. *Poa pratensis*, *Poa bulbosa* and *Poa secunda*).

Groundcover contains a high amount of litter, but relatively low cryptogams cover (Shiflet, 1994). Generally, cryptogams cover is higher at lower elevations and (at higher elevation) vascular plant cover precludes their growth (Belnap et. al. 2001). Dwarf sagebrush types are low in stature (12-20 inches). Ground cover consists of about 30 percent litter, few cryptogams, 10 percent gravels, and over 50 percent bare ground (Shiflet 1994, Goodrich 2000). In other words, low sagebrush sites are within their historic range of variability with 50 – 60 percent bare ground. Very little to none cryptogams crust was found within ground cover transects.

The mountain brush types are generally found in ecological settings slightly moister than sagebrush and drier than aspen types. They are primarily characterized by having an overstory of re-sprouting upland shrub species – chokecherry (*Prunus virginiana*), serviceberry (*Amelanchier alnifolia*), and wild rose (*Rosa* spp.). At lower elevations it often occurs on northerly exposures or in depressions where snow accumulates within the more widely scattered sagebrush types. At higher elevations, it also occurs on south-facing slopes or rocky ridges within quaking aspen and conifer types.

Riparian cover types can be found throughout the area along streams and around ponds, seeps, and springs. Although gradients often become important in determining the species that occur within any setting, typical tree genera includes: *Pices*, *Abies*, *Populus*, *Alnus*, *Betula*, and *Acer*. Common shrubs include *Salix*, *Ribes*, *Lonicera*, *Cornus*, and others. Understory in the riparian areas is dominated by sedges (*Carex* sp.), rushes (*Juncus* sp.) and grasses with a diversity of forb species.

**Past Disturbance:** Domestic livestock grazing has occurred on lands within the project area since the area was first settled in the 1860s. During the first decade, the rich bottomland of the valley and the low foothills provided adequate area for herds. Little use was made of the Forest. After the 1880s, local herds began to rapidly increase and transient sheep bands were moved through the area. Harsh winters seemed to control the early herds. It became the policy to follow the melting snow up the mountainside. Cattle and horse use came first, utilizing forage in the lower foothills and canyon bottoms. The range never had a chance to recover. By 1900, the “Two-mile Law” was passed. It specified that a sheep herd could not graze within two-miles of inhabitants. After the Supreme Court of Idaho upheld the new law, there was a 50 percent reduction of sheep numbers in 1902. This did not change the season of use.

At the time the Forest was established in 1907, it was estimated that there were 387,295 sheep and 10,781 cattle on the Forest. The range needed improvement, numbers needed to be regulated, and seasons needed to be established. Generally, people approved of the system with the exception of fees being charged. By 1913, management directives were established. Allotments were designated as cattle and sheep ranges, permitted numbers were based on numbers of livestock the first owner had out on the range, and season of use was determined by the weather. Livestock would enter the Forest the first of May and leave the Forest mid-October. As the science of livestock use evolved, range analysis process was used to determine carrying capacity. Capable (physical attributes such as vegetation type, slope, access to water etc.) rangelands were mapped to support grazing on a sustained basis. Season of use was determined by the average date the plants were capable of sustaining use without adversely affecting the plant’s vigor. Livestock permits (season of use and permitted numbers) were reduced and common use was eliminated in the 1940s and 1950s. Allotments were redesigned. Further information concerning the Forest’s historical use is found in the RFP FEIS (2003), site-specific historical use available found within Range Specialist’s Reports (2014) and the project file.

Other actions to improve management associated with these rangelands have also been

implemented over time as specified in old Allotment Management Plans and other records in files maintained at the Westside District Office. Of these, the most significant perhaps, was the initiation (early 1970's generally) of some type of grazing system, primarily rest-rotation grazing systems. Implementation of these grazing systems required construction of additional fences on cattle allotments. A number of supplemental water sources were developed/ constructed, primarily in the form of ponds, to improve livestock distribution and obtain more uniform use of these rangelands.

Additional practices to reduce shrubs and other unwanted, generally unpalatable, species and improve overall forage production for livestock were also applied. These practices included herbicide treatment (2, 4 D), plowing, and seeding. During the 1960's and 1970's, approximately 1,786 acres were treated with 2, 4-D to reduce or eradicate sagebrush, and mule's ears. The majority of these sagebrush treated areas have returned to the same or higher sagebrush canopy cover measurements. However, evidence of seeding introduced species remains in the cultural treated areas that have inhibited recovery to some extent. These are expressed by the dominant role of such species as smooth brome (*Bromus inermis*), bulbous bluegrass (*Poa bulbosa*), meadow foxtail (*Alopecurus pratensis*), and bulbous bluegrass (*Poa bulbosa*). Additionally, past use of herbicides has most likely slowed recovery by suppressing susceptible non-target species, primarily forbs. Additional seeding activities were also included in the project area, such as aerial seeding of introduced species. The actual acres impacted are unknown; however, the presence of the introduced grasses is found throughout the project area.

**Implementation Monitoring:** For the last 10-15 years, the Intermountain Region's policy has been to graze livestock based on annual forage resources, not on a set number of livestock or season of use. Grazing management practices relative to grazing systems, season of use, number of pastures, and number of livestock to be grazed are administrative evaluations that range managers and permittees make on an annual basis to implement the permit and meet the prescribed grazing standards. Annual monitoring is used on key areas to determine when livestock shall be moved between units or off the Forest. Livestock permits are not adjusted on an annual basis, but if 3-4 years of monitoring show consistent problems between number of livestock, season of use, or conflicts with other resources, then the permit will be adjusted on a permanent basis. Monitoring is the key to adaptive management as grazing systems, kind or class of livestock, and resource standards continue to change through time. Allotment Management Plans illustrates current monitoring locations. District files document annual monitoring.

Prior to the Revised Forest Plan, INFISH standard (6-inch Stubble Height on the greenline at the end-of-the-season) were applied to the project area. The majority of the allotments were within the range required by INFISH; however, there were isolated problem areas. In 2005, Revised Forest Plan Standards were added to the Term Grazing Permit. There have been issues with annual use standard being met when areas were not aggressively managed (Hydrologist Report, 2014). The District Ranger and Range Staff have worked with the permittees on the isolated problem areas and have met with positive results (e.g. Pocatello Allotment-Kenny Creek). Overall, upland use was slight to light (less than 35 percent use). Field inspections throughout the grazing seasons confirmed riparian forage utilization standards were met prior to upland forage utilization standards. These measurements validated the assumption that riparian areas are the limiting factor throughout the project area.

### **Effectiveness Monitoring:**

**Riparian Vegetation Monitoring:** When current conditions were compared to range analysis data conducted in wet meadows, riparian vegetative condition and trend has improved. However, at the time range analysis was conducted, riparian management was not emphasized;

therefore, baseline data is limited. Properly Functioning Condition assessments were conducted throughout the project area on perennial streams. The majority of the streams were classified as functioning-at-risk. Results are disclosed within the Water Resource Section. Some of the vegetative concerns expressed during the PFC assessments include the following: the lack of diverse age-class distribution present in some areas (e.g. Kinney Creek, East Fork of Mink Creek, South Fork of Mink Creek); lack of diverse composition of riparian-wetland plants (e.g. South Fork of Mink Creek); lack of vegetation cover to protect streambanks (e.g. Kinney Creek.); lack of vigor (e.g. Kinney Creek); and lacks adequate riparian-wetland cover to protect banks and dissipate energy during high flow (e.g. East Fork of Mink Creek-state, Kinney Creek, Crystal Creek, Walker Creek) and plant communities lack adequate source of coarse woody material (e.g. East Fork of Mink Creek-state). Meanwhile, other PFC assessments found vegetative components adequate (e.g. Michaud Creek, and Midnight Creek). This is not a completed list but a summarized list of the PFC assessments found in the project record and used in the specialists' reports. Multiple Indicator Monitoring transects were conducted as follow-up quantitative methods to the PFC. Results are also disclosed within the Water Resource Section and the specialists' reports. The RFP provides direction to use the Grazing Implementation Guide as the primary source of direction in Forest riparian areas (RFP 4-52). This includes recommending riparian forage utilization standards to improve vegetative concerns.

## **Upland - Rangeland Health Indicators**

**Non-native Invasive/noxious weeds:** Noxious weed species can cause serious modifications to landscapes by decreasing species biodiversity, competing with native species, contributing to erosion, increased sediment loading in streams, and many other factors. Idaho has classified 57 species of noxious weeds for containment (Prather, 2010). Currently the Westside Ranger district treats weeds aggressively as specified in the Revised Forest Plan (2003) and Caribou-Targhee Noxious Weed Strategy (2005). Control of noxious and invasive species is done using integrated weed management tactics such as chemical and biological treatments.

Species of concern that are being treated within the analysis area include; black henbane (*Hyoscyamus niger*), Canada thistle (*Cirsium arvense*), houndstongue (*Cynoglossum officinale*), musk thistle (*Carduus nutans*), poison hemlock (*Conium maculatum*), dyer's woad (*Isatis tinctoria*), spotted knapweed (*Centaurea stoebe*), and whitetop (*Cardaria draba*).

The Caribou-Targhee Noxious Weed Strategy (2005) includes strategies for these and other noxious weeds. Disturbance from activities such as fire, trails, grazing, and recreation has resulted in portions of the analysis area being susceptible to noxious weed invasions and establishment. Although the establishment of some exotic noxious weed species such as knapweed, leafy spurge, and dyer's woad are not dependent upon disturbance, the frequency and intensity of disturbance can be related to the existence and expansion of others. The increase in motorized vehicle use within the assessment area as well as the dispersal of noxious weed seeds by wildlife and recreational stock are all problematic contributors.

**Ground Cover:** Over one hundred ground cover observations were measured in 2009. Overall, the ground cover observations are greater than the minimum values identified in the range analysis handbook for each vegetation community type. Ground measurements are meeting desired condition. More information is found in the soil scientist report (2014).

**Shrub Cover:** The approach taken with shrub cover is slightly different than the other rangeland health indicators. The shrub cover indicator was evaluated at the landscape level instead of the individual site level. Canopy cover measurements for the individual sites were disclosed within site-specific results; however, the determination of rangeland health was not based on shrub cover. The desired mix of cover classes for sustainable sagebrush ecosystems

(USDA 1996 and RMRS –GTR-104 p. 3) includes: 10 percent in low canopy cover; 50 percent in moderate canopy cover; and 15 percent in heavy canopy cover. Using the Mid-Level Existing Vegetation Classification and Mapping (2014), the shrub land mix of cover classes were 33 percent in low, 22 percent in moderate; and 45 percent in heavy. These proportions indicate that sagebrush cover mix at a landscape scale does not meet desired distribution and potentially functioning at risk for sustainable rangeland diversity. The RFP provides direction to address imbalance in cover mix, with the use of prescribed fire and mechanical treatment activities (RFP 3-18 to 3-20).

**Species Composition:** For species composition, data was compared to descriptions of the various rangeland cover types in *Rangeland Cover Type of the Great Basin Region*. IN: *Rangeland Cover Types of the United States*, Society for Range Management, (Shiflet, 1994); *Aspen Community Type* (Mueggler 1988); *Riparian Community Type Classification of Eastern Idaho-Western Wyoming* (Youngblood et. al 1985); *Riparian Community Type Classification of Utah and Southeastern Idaho* (Padgett et. al 1989); *Sagebrush-grass Habitat Types of Southern Idaho* (Hironaka et. al. 1983); *Classification and Management of USDI Bureau of Land Management's Riparian and Wetland Sites in Eastern and Southern Idaho* (2002) *Successional Changes in the Tall Forb Type Wasatch Plateau* (Lewis, 1993) and others.

In general, sites are considered to be Functioning, Functioning-at-risk or non-Functioning based on the presence/absence of species described as common dominants of the various cover types and whether or not non-native invasive are present. Within the allotments, annual grasses such as cheatgrass (*Bromus tectorum*) are the most common indicators that an area was rated as Functioning-at-risk.

**Site-Specific Rangeland Health Indicator Results:** Overall, rangeland health in this assessment area has improved and continues to improve under a much less intense grazing regime. This improvement is evident in the established long-term trend evaluations of rangeland health and the comparison of current condition key areas , and range site analysis transects that are contained in files located at the Westside Ranger District and summarized in the Specialist Reports (2014). Currently, the overall statuses of rangeland cover types in the assessment area are considered to be “Functional-at-Risk” to “Functional”. The presence of desirable species within their respective cover types indicates long periods of stability with lack of past heavy grazing pressures.

Range Specialist Report (2014), Forester Report (2014), Fuel Specialist Report (2014), Soil Specialist (2014) and Non-forested Vegetation Report (2014) located in the project file provide additional site-specific information.

## Recreation

### ANALYSIS METHODS:

A variety of sources were used to generate this report. State of Idaho's Outdoor Recreation and Tourism Plan Summary, field observations, public comment from the analysis and past planning efforts and City of Pocatello trail surveys.

### ANALYSIS AREA:

The analysis area is located southwest of the City of Pocatello within the Lower Portneuf Watershed. The aggregate of the three allotment boundaries covered by this project area, here after called the project area.

## **General Information**

The project area is located southwest of the City of Pocatello; the project area is the backyard playground for many Pocatello residents. The area lies directly adjacent to hillside neighborhoods and rural residences of the Pocatello area. Michaud Creek, Midnight Creek, Cusick Creek, Gibson Creek, Mink Creek, Kinney Creek, Walker Creek, Bell Marsh Creek, Goodenough Creek and Crystal Creek serve as the communities' backyard. Local residents and visitors use their public land year-round from sunrise to sunset. Early morning trail visits, lunchtime get-a-ways and evening outings to the high country is part of daily life for many residents of Bannock County. Recreation uses and settings will be analyzed first, followed by an analysis of effects to the scenery, or visual quality of the analysis area.

### **Outdoor Recreation Activities Nationwide, Forest-wide and within Analysis Area:**

According to the 2010 USDA Resource Planning Assessment Report (USDA 2012, Gen tech. report) the following categories of outdoor activities on National Forests are highest in absolute number of participants nationwide: visiting developed sites; such as campgrounds, picnic areas and day use areas; nature viewing, which includes driving for pleasure, sight-seeing and outdoor photography); interpretive learning such as viewing signs, attending talks and programs at visitor centers. Day hiking, birding, swimming and motorized boating are also high in absolute numbers and recent growth. Recreation use of the Caribou-Targhee National Forest and the analysis area reflect the national participation rates.

The Forest Service conducts visitor use monitoring surveys every five years on a forest-wide basis. Estimated forest-wide visits for the Caribou-Targhee have increased from 1.6 million in 2005 to 2.1 million in 2010. The survey results for the last fifteen years indicate that the forest - wide visitation is over 60 percent male, a large percentage are people recreating within 25 miles of home, they stay an average of seven hours for day use sites and 36 hours for over-night developed sites. The most commonly reported primary activities are hiking, relaxing, viewing scenery and driving for pleasure. Hunting, fishing and motorized trail use have declined slightly between 2005 and 2010. Satisfaction results indicate visitors' concern for forest road conditions and a need for more recreation information. Questions of crowding indicated that some developed over-night sites are crowded, less for day-use areas and much less for general forest areas. Results note a significant core user-group that visits the forest fifty or more times per year for a variety of activities. Also of note is the average amount of dollars spent per trip has declined slightly from 2005 to 2010. (USDA, 2000, 2005 and 2010 NVUM results)

The project area includes Mink Creek Recreation Area. The "front country" of Mink Creek drainage is used extensively by locals for a variety of outdoor pursuits due to the close proximity to the City of Pocatello and associated smaller communities. The area is popular for camping, hiking, viewing scenery, hunting, fishing, biking and OHV trail use during the snow-free months along with skiing and snowmobiling during the winter. Many locals visit the forest daily as travel time to the canyon from surrounding communities is under thirty minutes. The Michaud Creek drainage and the Midnight drainage generally have fewer visitations than the lower Mink Creek area; but the drainages do receive year-round use including trail travel, hiking, and viewing scenery and wildlife along primitive roads and trails during the snow-free season. There is little opportunity within the analysis area for water sports due to limited water resources. Mink Creek, ponds and other area waterways within the analysis area only offer limited fishing and wading. Forest Service road counters and patrols have indicated significant night use of area roadways as people gather for camp fires and group events in Mink Creek, South Fork of Mink and Gibson Jack Creek (Field observations).

**Recreation Setting and ROS:** The Forest Service uses a nationally recognized classification system called the Recreation Opportunity Spectrum (ROS) for identifying, describing, planning

and managing a range of recreation settings, opportunities and experiences. The Forest Plan uses ROS methodology to guide development levels and recreation settings for forest landscapes. Recreation settings vary from primitive to highly develop. ROS mapping protocols and direction can be found in Forest Service Handbooks and Manuals and in particular, the USDA ROS User Guide (USDA Forest Service 1982).

ROS is a spectrum that considers recreation activities, settings and experiences. It ranges from Urban, such as a community visitor center, to Primitive, such as the Middle Fork of the Salmon River. The spectrum is divided into six classes. These classes differ in the level of facilities provided and the degree of naturalness, and opportunity for solitude offered.

**Scenery and VQOs** Scenic quality is a fundamental element of recreation experiences. Viewing scenery is a popular recreation activity nationwide. Public acceptance of forest management practices is heavily based upon the visual appearance of the forest.

Regulations governing National Forest System land and resource management planning include requirements for consideration, management, and protection of intangible resources such as scenery and aesthetics. The Forest Service uses the Scenery Management System (SMS) to fulfill these requirements. The SMS provides a systematic approach for determining the relative value of scenery on National Forest System lands and was used in this analysis to inventory and evaluate scenery and the public's desire to retain natural appearing landscapes. This system of analysis supports conservation of other landscape concerns, most notably the recreation setting.

Table 3-6 Visual Quality Objectives and Scenic Integrity Objectives Conversion and Acres Managed for VQO/SIO within Project Area

VQO/ SIO	Explanation	Acres within Project Area
Preservation/ Very High	The valued scenery "appears natural or unaltered." Only minute visual disturbances to the valued scenery, if any, are present.	0
Retention/ High	The valued scenery "appears natural or unaltered," yet visual disturbances are present; however, they remain unnoticed...	0
Partial Retention/ Moderate	The valued scenery "appears slightly altered." Noticeable disturbances are minor and visually subordinated to the valued scenery...	8,000
Modification/ Low	The valued scenery "appears moderately altered." Visual disturbances are co-dominant with the valued scenery...	3,000
Maximum Modification/ Very Low	The valued scenery "appears heavily altered." Disturbances dominate the valued scenery being viewed;	0

**Revised Forest Plan (RFP):** The Caribou RFP (USDA FS 2003) contains management direction and is incorporated into this report by reference. Relevant direction from the RFP includes the desired future conditions for recreation, trails and roads (pg 3-16 & 4-47), relevant Forest-wide direction and standards and guidelines (Chapter 3), and specific management prescription direction (Chapter 4).

Recreation settings (Recreation Opportunity Spectrum or ROS) were first identified for the Caribou National Forest during the 1986 Forest planning process and re-evaluated and mapped as part of the 2003 Forest Plan Revision. The ROS management objectives are identified in the 2003 Forest Plan map package and applied as part of plan prescriptions. The Forest Plan uses the VMS to analyze alternatives and develop management direction for scenic resources. This forest-wide direction is in the form of visual quality objective (VQO) mapping and some specific management area direction for visual resources. Both of these tools help forest managers and the public define levels of acceptable change for forest areas and also identify needed restoration of scenery and recreation settings.

A review of the project area and the RFP Direction highlight four RFP prescription areas that are of greatest interest, with respect to recreation and livestock. They are: 2.1.3 Municipal Watershed, 4.1 Developed Recreation Sites, 4.2 Special Use Recreation Sites, and 4.3(b) Dispersed Camping Management. RFP direction does not allow livestock grazing within 2.1.3, 4.1 Prescriptions, and 4.3(b) Dispersed Camping Management. The RFP does allow livestock grazing with 4.2 prescription areas.

**Existing Developments and facilities within the Analysis Area** The project area offers several developed sites, trailheads and designated trails. Recreation Specialist report includes the facilities offered at each site, the primary recreation activities that occur and their relative use levels. Use levels are characterized as high, medium and low. Actual use numbers are not gathered on the scale of the analysis area. Some sites are managed by other recreation providers under special use permits and in some cases site improvements are owned by permit holders. Many sites have been developed and/or reconstructed with various partnership grant funds as noted. Table 3-7 summarized the developed recreation sites and the site's exposure to livestock.

**Developed Recreation Sites:** Within the project area there are several developed recreation/special use sites, one campground, one recreation residence tract and Bannock guard station. In addition to these sites, sixteen trailheads are considered developed (more information on trailheads can be found under the Trails heading below). These sites would all be governed by *Prescription 4.1(b) Developed Recreation Sites* of the RFP.

Scout Mountain, the recreation residence, Camp Taylor, Mink Creek archery range and the guard station are entirely fenced from livestock. Most trailheads are not fenced. The District receives occasional complaints about livestock in or around the campground; most complaints are about the presence of livestock and the associated fecal material, smell, or noise.

Table 3-7: Developed Sites and Trailheads within Project Area, Management Status and Fencing/Livestock Exposure

Name	Facilities	Activities/Use	O&M/ Facil'ts. Owner	Livestock fencing?
Scout Mountain Campground/E.Fork TH	30 camp sites, group area, RR, water	Camping/Trail use, high use in summer/fall	O/M by Concession. Facilities owned by FS. IDPR grant funds used.	Yes, livestock free unless fence fails.
Camp Taylor Organization Camp	Lodge and cabins, water toilets	Cabin use, Moderate use	O/M & fac. owned by Camp Taylor Inc. Under permit.	Yes, no livestock
Recreation Residences	10 private cabins, water system	Cabin use, high use	O/M & fac. owned by Homeowners Assoc. Under permit.	Yes, no livestock
Mink Creek Archery Range	trails, bridges, RR	Archery, high use summer/fall	O/M & fac. owned by Archery Assoc. Use under permit.	Yes, no livestock
Kinney Creek Trailhead	Parking/sign	Trail Use	O/M and fac. owned by FS	No, exposure to livestock
Lead Draw Trailhead	Parking/signs	Trail use	O/M and fac. owned by FS	No, some exposure to livestock
Crestline Trailhead	Parking/signs	Camp/trail use, high use summer	O/M and fac. owned by FS, IDPR grant funds used.	No, some exposure to livestock
Mink Creek Group Area	Pavilion/RR/ water/sign	Group use, high use summer	O/M by Concession. Fac. owned by FS; IDPR grant	Yes, no livestock
East Fork Mink Creek Nordic Center	A-frame, yurt, garage, RR, trail system	Ski/Snowshoe high use winter	O/M & fac. owned by City of Poc.. Use under permit. IDPR grant funds used.	No, some <i>livestock impacts</i>
Cherry Springs Nature Area	Parking, RR, signs trail, bridges	nature study; High daily use all year	O/M & fac. owned by FS. Volunteers. IDPR grants funds used.	Yes, no livestock
Slate Mountain Trailhead	Parking, barriers, trail bridge, signs	Trail travel, high use/summer	O/M & fac. owned by FS. IDPR grant funds used.	No, little exposure to livestock
West Fork/Valve House Trailheads	Parking, trail bridge, signs	Trail travel, high use all year	O/M & fac. owned by FS. IDPR grant funds used.	No, Some exposure to livestock
Corral Creek Trailhead	Parking, signs, bridge	Trail travel, high use all year	Operated/ managed, fac. owned by FS. IDPR grant funds used.	No, exposure to livestock
Porcelain Pot/Beaver Pond/S.Fork Trailheads	Parking, signs	Trail travel, high use all year	Operated/ managed, fac. owned by FS. IDPR grant funds used.	No, exposure to livestock
Walker Creek Trailhead	Parking, signs	Trail travel, moderate use summer/fall	Operated/ managed, fac. owned by FS. IDPR grant funds used.	No, Some exposure to livestock
Good Enough Trailhead	Parking, signs	Trail travel, high use summer	Operated/ managed, fac. owned by BLM. IDPR grant funds used.	No, Some exposure to livestock
Box Canyon/Valve House Connector Trailheads	Parking, signs	Trail travel, high use summer	Operated/ managed, fac. owned by FS. IDPR grant funds used.	No, exposure to livestock
Elk Meadows Trailhead	Parking, signs	Camp/trail use, high use summer	Operated/ managed, fac. owned by FS.	No, exposure to livestock



**Dispersed Camping Areas:** The RFP identified two high priority dispersed recreation areas within the analysis area to be managed under *Prescription 4.3(b) Dispersed Camping Management*, they are: East Fork of Mink Creek and South Fork of Mink Creek. Although use data is not available, it is clear there is more demand than supply. District personnel observations suggest that un-developed dispersed sites receive more local use (people with local ties), and that use is very traditional (i.e. same family in the same site the same time of year, year after year).

Many of the dispersed sites are in very close proximity to livestock (especially cattle), because people and cattle like the same terrain; flat, shady and close to water. While the sites are occupied by forest visitors (people), cattle usually stay out of the immediate area, but there is usually evidence that they have been there. The sites may still be used. The District hears of some complaints about livestock in dispersed sites each camping season.

**Trails:** Within the project area, there are more than 130 miles of trail and trailheads (2003 *motorized travel route inventory*). Trail opportunities are diverse within the project area, with opportunities for motorized and non-motorized experiences. There are also opportunities for different types of users within these two general categories to have an experience without conflict. In general, all trail use is high on most area trails; the exception is some trails further from town.

The District receives some complaints about livestock on or around trails and trailheads. The District also receives complaints about trail users leaving gates open and harassing livestock from livestock permittees. ATV cattleguards help to alleviate these concerns as finances and opportunities permit.

**Recreation Setting, Scenery and Livestock:** Livestock grazing and associated facilities have been present on much of the analysis area for decades. When cows and campers occupy the same place, all ROS settings can be affected.

Most acres of the municipal watershed and the Research Natural Areas exclude livestock. These are the larger core semi-primitive non-motorized zones within the analysis area. Based on past planning comments, many people recreate within these zones to avoid livestock. Other semi-primitive non-motorized zones occur in Indian Creek, and the eastern ridgeline of Scout Mountain and western ridge of Old Tom. These areas are smaller than some SPNM zones, but still provide some solitude and challenge due to their topography. Cows are present in these areas; however, in most cases steep slopes and thick canopy keep them from congregating in large numbers. Based on past public comment and research conducted by Rocky Mountain Forest and Range Experiment Station, livestock can negatively affect the experience and setting when people disperse camp. People and cows like to loaf in the same places; flat areas next to roads, water and shade. This happens late in August within the South Fork of Mink Creek dispersed camping sites and along the turn-offs dispersed camp areas of Forest Road #2 and #870. Camping with cows or with cow waste is unpleasant. Both can attract flies, which also contributes an unpleasant setting for camping and recreating. These dispersed camp areas are zoned as Roaded Natural (ROS).

Livestock along trails can affect or enhance the recreation setting and experience. Some people like to see cattle out in the forest and others do not like to see livestock while they are recreating. Still, others do not have an opinion either way. Some people have reported a fear of cows and will avoid areas with evidence of livestock. Cattle hanging around trails can obstruct travel and leave waste. Based on public comment for this analysis and past planning processes, grazing within Kinney Creek and Elk Meadows has impacted recreation settings and visual quality in some areas at some times of the grazing season. Elk Meadows area does have

livestock/recreation conflicts from mid-summer to fall, a portion of this area is managed under the 2.1.3(b) municipal watershed prescription.

Visual quality objectives are met the majority of the time in most seen areas of the analysis area. At times some watering areas, springs or troughs, may look “beat out” by cattle, with little ground cover, dust and flies; this generally is a site-specific condition made worse by dry weather conditions. These conditions will not meet the visual quality objective of Partial Retention when viewed as foreground.

## Wildlife

### Analysis Methods:

Data gathered through: A combination of CNF Wildlife White Papers (USDA-FS 2010), Idaho Department of Fish and Game databases, ISU/USGS GAP analysis (USGS/UI 2014), applicable scientific literature, survey data and reports, monitoring data, aerial photos, known habitat types, field visits (Austin and Colt 2012, Green 2012 field notes), and a review of other specialist reports (Range, Fisheries, Hydrology) completed for this project have been used to determine the existing condition (Range, Fisheries, Hydrology and other specialist reports available in the project record). The contents of Chapter 3 are a summary of Wildlife Reports (2014) for this project.

**Threatened and Endangered Species:** Currently, USFWS uses the new “IPaC” (Information, Planning, and Conservation) system to convey potential listed species presence within an analysis or project area (as opposed to conveying potential presence in the county or counties where the project is occurring, making the list more site specific). An official updated species list for this analysis area was acquired through the “IPaC” system (on March 14, 2014 Consultation Tracking # 01EIFW00-2014-SLI-0253, IPaC list located in the project record). The species list acquired through “IPaC” listed the Banbury Springs Limpet, the Bliss Rapids Snail, and the Snake River Physa Snail as species potentially occurring in the analysis area. The Banbury Springs Limpet, the Bliss Rapids Snail, and the Snake River Physa Snail do not occur in or near the analysis area. Therefore, No Effect determinations for these species were made, and the USFWS concurred with these determinations during the annual streamlining meeting on April 8, 2014 (Streamlining meeting notes in project record). In addition to the species shown on the IPaC list as potentially occurring in the project area, several other species were discussed at this meeting including Grizzly Bear, Canada Lynx, Ute Ladies-tresses, Yellow-Billed cuckoo, Whitebark Pine, North American Wolverine, and Greater Sage Grouse. Reference the streamlining meeting notes (project record) for additional information.

**Sensitive Species:** The Regional Forester identifies Sensitive Species when population viability is a concern for species as evidenced by current or expected downward trends in population numbers and/or habitat. The Wildlife Report is located in the project file.

**Spotted Bat-** In Idaho, occurs primarily in southwest and central Idaho and is not generally expected to occur in Southeast Idaho. (Miller et al. 2005, page 45, WBWG 2005, USDA-FS 2003b p. 3-214, IDF&G 2005). While this species characteristically occurs in association with xeric and riparian habitats in deep, narrow canyons where massive cliffs predominate (IDF&G 2005), overall they utilize a variety of habitats (USDA-FS 2003 p. 3-214), and dominant vegetation at occurrence sites within Idaho includes sagebrush, juniper, mountain mahogany, cottonwood and Ponderosa Pine Forests (IDF&G 2005). While no observations of Spotted bats have occurred within or adjacent to the analysis area (nearest recorded observations are approximately 30 miles southwest of the analysis area (IFWIS 2013)), the Caribou Forest lies between known populations in Southwest Idaho and the northeastern portion of the Greater

Yellowstone Area in Montana and Wyoming (USDA-FS 2003b p. 3-214). Overall, distribution of spotted bats is patchy and limited geomorphically, by roosting habitats (cliffs) (USDA-FS 2003b D-50), and their close association with prominent rock features (Miller et. al. 2005 p.45)(which are lacking in the analysis area). While they may be intermittently present in appropriate habitats (which would be expected to be limited to foraging movements), overall presence of spotted bats within the analysis area is not expected. Since presence within the project area is not expected, there will be no impact to this species under any alternative. Since there will be no impacts to Spotted Bats, there will be no Cumulative effects. This species will not be discussed further.

**Townsend's big-eared bat** – This species occupies moist forests, as well as arid savannah and shrub steppe. It has been found foraging over sagebrush-grasslands, riparian areas, and open pine forests within the Greater Yellowstone Ecosystem (USDA-FS 2003b p.3-214). Townsends forage primarily forage on Lepidopteran's (moths and butterflies) (IDF&G 2005b), but occasionally will forage on flies and beetles as well (USDA-FS 2003b p. 3-214). Known maternity colonies occur well to the northwest of the analysis area on the Craters of the Moon National Monument (IDFG 2005b). Townsend's use a variety day roosting habitats, including caves, cliffs, buildings, bridges, and tree cavities. (USDA-FS 2003b p. D-136, Groves et al 1997 p.285)

There are no documented occurrences of Townsend's within the analysis area; however Townsends have been documented in the Portneuf Range to the east and the Elkhorn Mountains to the south (USDA-FS 2003b D-136). There are several documented occurrences just to the northeast of the analysis area, in the Blackrock and Portneuf areas northwest to the Pocatello Creek area, most of these are historical observation (occurring from the ~1920's to the ~1960's), with the single exception of an observation in 1991 which occurred in the South Fork Pocatello Creek drainage (IFWIS 2014).

While there are no documented occurrences within the analysis area, habitat for Townsend's Big-eared bats and their prey exists within the analysis area, and they are known to occur in adjacent areas. The presence of Townsend's big eared bats within the allotments is probable.

**Pygmy Rabbit** –Pygmy rabbits generally occur in in sagebrush habitats with dense structure, high canopy cover cover and deep soils. Sagebrush is the primary food source, but grasses and forbs are eaten in mid-late summer (USDA-FS 2003b p. D-155). The vast majority of Pygmy rabbit observations in Southeast Idaho have occurred off-Forest, and habitat for Pygmy rabbits within the analysis is inherently limited due to the steep topographies in most areas. Only one documented occurrence of a Pygmy rabbit within the allotments is known, a historical sighting that occurred in 1931 near Outlaw Spring on the north end of the Michaud allotment. Recent field reviews, focusing on the area where this historical sighting occurred, observed no pygmy rabbits, pygmy rabbit sign (pellets), or suitable habitat for pygmy rabbits (Austin and Colt 2012). Since presence within the project area is not expected, there will be *no impact* to this species under any alternative. Since there will be no impacts to Pygmy Rabbits, there will be no Cumulative effects. This species will not be discussed further.

**North American Wolverine** –While wolverine denning habitat is known to have certain characteristic criteria, in general wolverine habitat is best described more in terms of adequate year-round food supplies in large, sparsely inhabited areas, rather than in terms of certain vegetation types or topography (USDA FS 2003b p. D-138) Denning habitat, characterized as rocky sites, such as north-facing boulder talus or subalpine cirques in forest openings (USFWS 2010 and USFWS 2014a), does not exist within the allotments. Further, the areas within the allotments lack persistent stable snow cover greater than five feet required for denning, and except for small areas of Scout Mountain, are well below 8200' elevation which is considered

the minimum elevation for Wolverine denning in Idaho (USFS 2010). There are no documented observations of wolverines within the analysis area (IFWIS 2014), and wolverine presence is not expected, even terms of movement through the area. The analysis area cannot be characterized as a “large sparsely inhabited area” given the location immediately adjacent to the city of Pocatello, and the corresponding high amounts of recreation and other uses that occur. Wolverines were discussed during the Level 1 streamlining meeting for this project, and a *No Effect* determination was made (USFS Streamlining Notes 2014). Since presence within the project area is not expected, there will be *No Impact* to Wolverines under any alternative. Since there will be no impacts to wolverines, there will be no Cumulative effects. This species will not be discussed further.

**Gray Wolf**- Gray wolves were removed from the Endangered Species list on May 11, 2011 (USFWS 2011). There are no known established packs within or adjacent to the project area. The nearest known pack, the “Tex Creek Pack” occurs approximately 50 miles northeast of the project area, east of Idaho Falls (USFWS et al. 2014 Wolf Report Figure 3 and Table 3a). Given the distance between the project area and the nearest known wolf pack, and that there are no documented observation of wolves within the allotments, wolf presence within the area is not expected. Further, movement of gray wolves into the analysis area is not expected due to existing barriers (large cities/ populated areas, interstates, etc). Therefore there will be *No Impact* to Gray Wolves under any alternative. Since there will be no impacts to wolves, there will be no Cumulative effects. This species will not be discussed further.

**Trumpeter Swan** –Suitable nesting habitat for trumpeter swans includes marshes, lakes, beaver ponds, and oxbows and backwaters of rivers. They prefer quiet, shallow water with dense aquatic plant and invertebrate growth, with tall emergent vegetation being important to provide cover for both adults and broods (USDA-FS 2003b p. D-114). Known nesting habitat in SE Idaho includes Palisades Reservoir, Salt River, Grays Lake, and Bear Lake NWR, along the length of the Bear River, (including Alexander Reservoir), and along the Snake River (Groves et al. 1997, 52) (USFWS 2012). In SE Idaho the vast majority of documented Trumpeter Swan observations have occurred adjacent to these larger rivers and reservoirs. There are no documented occurrences within or adjacent to the analysis area. The American Falls Reservoir, especially the Fort Hall Bottoms area, is the area nearest to the allotments where there are known trumpeter swan occurrences and breeding activity (IFWIS 2014). These allotments occur in relatively steep terrain with small high gradient streams, (lacking marshes, lakes, and large rivers) and therefore no suitable habitat for trumpeter swans is expected to occur within the allotments. This is supported by USGS GAP distribution models, showing a lack of habitat and occurrence within the allotments (USGS GAP distribution GIS and analysis area map, project record). Since there is no presence of Trumpeter swans within the analysis area due to a lack of suitable habitat, *No Impacts* will occur under any alternative. Since there will be no impacts to Trumpeter Swans, there will be no Cumulative effects. This species will not be discussed further.

**Harlequin duck** – Suitable habitat for Harlequin ducks includes relatively undisturbed, low gradient (< 3°), mountain streams with dense shrubby riparian areas & woody debris for nesting. The only area on the Caribou National Forest (CNF) that has been identified as potentially providing habitat for Harlequin ducks is the McCoy Creek area, south and west of the Palisade reservoir. Outside of this area, the presence of Harlequin Duck on the CNF is considered to be highly unlikely (USDA-FS 2003b p. D-115). Specific to the analysis area, water bodies generally consist of small relatively high gradient streams and therefore lack the water depth and area to provide suitable Harlequin duck habitat. No Harlequin ducks have been observed within or adjacent to the allotments (IFWIS 2014). Further, USGS GAP analysis shows no distribution within or adjacent to the analysis area (USGS GAP distribution GIS and analysis area map, project record). Since there is no presence of Harlequin duck within the analysis area due to a

lack of suitable habitat, there will be no impact to this species under any alternative. Since there will be no impacts to Harlequin ducks, there will be no cumulative effects. This species will not be discussed further.

**Peregrine Falcon** – Peregrine Falcons are typically found in open country near rivers, marshes and lakes. Foraging habitat includes wetlands and riparian habitats; meadows and parklands; croplands; gorges and mountain valleys; and lakes which support good populations of small to medium terrestrial birds, shorebirds, and waterfowl. Cliffs are preferred nesting sites, but other tall manmade structures, such as towers and high rise buildings may be used as well (USDA-FS 2003b p. 3-216).

While Peregrine Falcons are known to occur within and adjacent to the Caribou National Forest (near Grays Lake, Grays Ridge, Soda Springs, and Last Chance Canal (Moulton 2008, 2008b; USDA-FS 2003b p. D-101)), there are no known eyries in the analysis area, nor are there any suitable nesting cliffs that have the potential to serve as eyries. Further, there is no identified potential nesting habitat (CNF FEIS D-101, USGS GAP distribution GIS and analysis area map, project record) within the analysis area. Suitable habitat (ie large water bodies such as Grays Lake, Snake River, American Falls Reservoir) do not occur within or adjacent to the analysis area. Since Peregrine Falcons are not expected to be present due to a lack of suitable habitat, *No Impacts* to Peregrine Falcon will occur under any alternative. Since there will be no impacts to Peregrine Falcon, there will be no Cumulative effects. This species will not be discussed further.

**Bald Eagle** – While Bald eagles may be found in a variety of habitats they are found primarily near larger bodies of water including rivers, reservoirs and lakes (Groves et al 1997). On and adjacent to the CNF, nesting habitat is associated with rivers, lakes, and reservoirs, while wintering habitat is comprised mainly of major rivers and large lakes (USDA-FS 2003b p. D-91), none of which occurs within or adjacent to the analysis area. There are no known bald eagle nests located in analysis area, the nearest known bald eagle nest occurs approximately 7.5 miles north of the Michaud allotment, near the Fort Hall Bottoms area (IFWIS 2014).

There are no documented observations of bald eagles within the analysis area, however, primarily in the winter; it is acknowledged that temporary presence of high quality food may entice bald eagles to areas far removed from aquatic zones associated with rivers, lakes, and reservoirs (USDA-FS 2003b p. D-91). Thus if big game carrion or other similar food sources become available within the analysis area, bald eagles may be present temporarily while the high quality food source is available (this would be expected to amount to a day or two, until coyotes and other scavengers consume or disperse the food source so it is no longer an attractant to Bald eagles).

Given the nearest nest occurs approximately 7.5 miles north of the Michaud allotment, management direction as described on page 3-27 and 3-28 of the Forest Plan (USDA-FS 2003) for Zones I, II, and III do not apply to this project. Habitat for bald eagles within the analysis area is lacking, there have been no documented observations, and any presence within the analysis would be short term, occurring primarily during the winter, and only occurring if high quality food sources are available. Therefore, presence of bald eagles within the analysis area is not expected. Since presence within the project area is not expected, there will be *No Impact* to this species under any alternative. Since there will be no impacts to Bald Eagles, there will be no Cumulative effects. This species will not be discussed further.

**Northern Goshawk** – Suitable habitat (mature forested habitat with high canopy closure and open understories) occurs in forested areas throughout the analysis area. Mapping of capable/suitable habitat for MIS species was recently completed (Colt and Green 2012), and

according to this analysis potential Northern Goshawk habitat occurs in all three allotments. During extensive project level surveys (which included 152 calling stations), no aural or visual detection of goshawks, sign or evidence of goshawk activity or active nests of goshawks were encountered. In 1994, two goshawk territories were documented within the Pocatello allotment, these territories were revisited in 2012, and no evidence of recent activity was observed (Austin and Colt 2012). Although nesting within the allotments is not expected, given that habitat for goshawk occurs within the allotment, the presence of goshawks within the allotments is probable, expected to occur incidentally during foraging activities.

The exact reason for the lack of Northern Goshawk nesting within the analysis area is generally unknown, it may stem from a lack of suitable prey, or a lack of optimal nesting habitat (Colt and Austin 2012). Fire exclusion is likely one of the factors contributing heavily to a lack of Northern Goshawk nesting within the analysis area. Historical livestock grazing often decreased the amount of herbaceous fuels, which subsequently reduced fire frequency and allowed for an increase in tree density (Reynolds et al 1992). This is likely one factor (combined with aggressive fire suppression, and others) that reduced fire frequencies in the analysis area. Open understories are preferred by Northern Goshawk, and the general lack of open understories due to fire exclusion from the analysis area, has likely resulted in the “lack of optimal nesting habitat,” and the dense understories in many areas that preclude Northern Goshawk use of the analysis area.

**Columbian sharp-tailed grouse** – Sharp-tailed grouse and sharp-tailed grouse sign have been observed on multiple occasions by multiple individuals throughout the year (Colt and Austin 2012), presence within the analysis area is known. Sharp-tailed grouse are habitat generalists and can adapt to many kinds of habitat (Apa 1998). Similarly, Hays et al. (1998) reported that Columbian sharp-tailed grouse use a wide variety of habitats, including shrub-steppe, meadow-steppe, mountain shrub, and deciduous riparian. Marks and Marks (1987) (cited in Colt and Green 2012) reported that sharp-tailed grouse use a variety of habitats including grass, forb and shrub patches in Idaho. Oedekovan (1985) described good sharp-tail habitat as a mix of well-developed perennial bunchgrasses, forbs and many species of shrubs. Utilizing these criteria, mapping of capable/suitable habitat for sharp-tailed grouse was completed (Colt and Green 2012) and areas within all three allotments have been mapped as potential sharp-tailed grouse habitat. It is expected that the lower portions of the analysis area, especially those areas adjacent to known active lek locations, provide important summer/brood rearing and fall/winter habitat. Riparian and mountain shrub habitats are extremely important for wintering Sharp-tailed grouse (Marks and Marks 1987)

While the analysis area is known to provide important sharp-tailed grouse summer/brood rearing and fall/winter habitat, no lekking is known to occur within the analysis area and nesting within the analysis area is generally not expected. While there are no known leks occurring on the allotments, there are several occupied leks surrounding the allotments, at lower elevations off of the analysis area (many within 2 miles of the allotments especially to the east and north) (IFWIS 2014, USDA-FS 2003b p. D-122). Given the location of the leks off-forest, nesting within the analysis area is unlikely; several authors describe nesting as generally occurring within 2.0 km (1.2 miles) of the lek location (Hoffman and Thomas 2007, Ulliman et. al. 1998 p.11), while others describe nesting as occurring within 1.0 mile of the lek location (Apa 1998, cited in USDA-FS 2003b p. D-123). Most occupied leks are more than 1.0 mile from the forest boundary; however, some of the leks do fall within 1.2 miles of the analysis area (See Sharp-tailed grouse Lek Buffer Map in Project Record). While specific sharp-tailed grouse nesting locations are unknown, given the distance of the leks from the forest boundary (and other limitations, as described below) it is unlikely that sharp-tailed are nesting within the analysis area, but nesting adjacent to the analysis area is expected.

As described in the “MIS Suitability” (Colt and Green 2012) none of the delineated habitat across the Caribou National Forest was found to be in unsatisfactory condition. The field reviews of the allotments combined with the number of observations within the analysis area and the presence of active leks surrounding the analysis area indicate that habitat within the allotments is generally in satisfactory condition. It is important to note, that even in the absence of any impacts to sharp-tailed grouse habitat, lekking on the forest would not be expected due to the topography and vegetation occurring in the analysis area, sharp tails prefer flat areas (<2% gradient) with short and sparse growing vegetation (Hoffman and Thomas p.33), and areas such as this are lacking within the analysis area, particularly with regards to areas less than 2% gradient. However, the presence of active leks close to the analysis area indicates that areas within the analysis area are functioning as suitable brood rearing habitat (Hoffman and Thomas p.35). Conversely, in certain drainages (specific sites within the analysis area), field reviews along with data from the Hydrologist report suggests that current livestock grazing management is not compliance with current implementation standards. For instance, several streams within these allotments are in various stages of achieving PFC (and with active leks nearby) include Walker Creek, Indian Creek, Michaud Creek, and Trail Creek. Declining trends in long-term indicators have also been demonstrated on Indian Creek (Hydrologist Specialist report p.7). These current conditions and trends are attributed primarily to livestock overuse of riparian vegetation. Further, field reviews, particularly of the Indian and Walker Creek drainages indicate that several of the potential adverse impacts to sharp-tailed habitat, as described on page 25 of Colt and Green 2012 are occurring in site specific areas within these drainages, especially with regards to the high intensity grazing impacts of altering riparian vegetation and reducing the grass, herbaceous, shrub and tree cover within riparian areas.

**Greater Sage Grouse** –Significant efforts to ensure the conservation of sage grouse and their habitats are currently underway. As part of these conservation efforts, mapping of sage grouse habitats has been completed across the state; these mapping efforts have been completed by and in coordination with several federal and state agencies. In short, the analysis area is not included in any Sage Grouse Planning Areas (SGPA’s) and no Key Habitat, Preliminary Priority Habitat (PPH) or Preliminary General Habitat (PGH) exists within or adjacent to the analysis area.

Local to the Caribou National Forest, MIS suitability mapping has been completed (Colt and Green 2012), and areas within all three allotments were mapped as potential sage grouse habitat. These areas mapped as potential habitat were the focus of project-level surveys. Pictures and descriptions of these surveys are found in the Pocatello, Midnight, Michaud Grazing Allotment Wildlife Surveys 2011-2012 (Colt and Austin 2012). In general, many of the areas initially mapped as potential habitat were found to have different vegetation characteristics than what were remotely mapped, were too steep, or were too small and isolated to support a sage grouse population. In addition to habitat, several areas were surveyed to search for sage grouse presence (both on foot and on horseback using dogs), no sage grouse or sign of sage grouse was seen (Colt and Austin 2012). The steep nature of the allotments, marginal habitat conditions, small isolated sage brush communities, and lack of presence (both historically and from current survey data), indicate sage grouse habitat within the analysis area is lacking.

Documented observations of sage-grouse within the analysis area are limited to two records. During a 2013 flight to count deer, ~12 sage grouse were observed roosting high up on a ridgeline, to the east of Indian Mountain. Further investigation in to sage grouse presence in this area revealed that sage grouse had also been observed in this area during deer and elk surveys in 1968 (Zach Lockyer and Paul Wackenhut, Personal Communication, email and maps in project record). The 1968 and 2013 observations represent the only known documented observations of sage grouse within the allotments. The area where the sage grouse were observed was high up on a ridgeline with minimal vegetation and low height shrubs, atypical of habitat sage grouse would

use during the spring, fall, and summer timeframes. This area may possibly serve as a wintering area, or may be a resting/stopover area (Note that in 2013 a larger group of 30 sage grouse was also observed in the same area, however, these grouse were flying to the west towards Arbon Valley). There are no documented observations of sage grouse during the spring/summer/fall timeframes within the analysis area. There are no known leks within or adjacent to the allotments (nearest known lek is approximately 10 miles to the southwest of the allotments in Arbon Valley).

Given that there have been no spring/summer/fall observations of sage grouse within the analysis area, and that extensive field reviews have determined that sage grouse habitat within the analysis area is lacking, presence of sage grouse within the analysis area is not expected. However, given the recent observation and that a potential wintering/stop over area does exist within the analysis area, sage grouse will be carried through the analysis to ensure any potential impacts to this area where they have been observed are evaluated.

As described above, there is no Preliminary Priority Habitat (PPH) or Preliminary General Habitat (PGH) within or adjacent to the project area (USDOI-BLM 2012). US Forest Service Interim direction for the management of sage grouse habitat (USDA-FS 2012) applies specifically to areas designated as PPH and PGH habitat, and therefore is not applicable to this project.

**Great Gray Owl** – Great Gray Owls forage primarily on voles, pocket gophers, and other small mammals throughout the year, utilizing mixed coniferous forests usually bordering small openings or meadows (USDA-FS 2003b p. D-111). While there are no recent documented observations of Great Gray Owls within the allotments, suitable Great Gray Owl habitat occurs within allotment boundaries. Only two documented observations of Great Gray Owls have occurred, both recorded in the Pocatello Allotment in the Lead Draw area in the summer of 1989 (IFWIS 2014). Given that suitable habitat for Great Gray Owl exists within the analysis area, presence within the allotments is probable.

**Flammulated Owl** – Flammulated Owls are almost exclusively insectivorous, and are found in a variety of forest types (USDA-FS 2003b p. D-109). Suitable habitat occurs in the analysis area. Project level surveys for Flammulated Owls documented presence in all three allotments (Colt and Austin 2012). Flammulated Owls are known to occur in the analysis area.

**Boreal Owl** - While there are no documented observations of Boreal Owls within the allotments, suitable habitat (mature Douglas-fir, mixed conifer, spruce-fir and aspen forests) occurs within the analysis area. Boreal Owl presence within the allotments is probable.

**Three-toed Woodpecker** – Suitable habitat (snags) occurs within the analysis area. Three-toed woodpeckers forage primarily on wood-boring insect larvae, but will also eat moth larvae, spiders, berries and cambium. These woodpeckers primarily excavate cavities in standing trees or snags, but will nest in a variety of habitats including riparian willows (USDA-FS 2003b p. D-117). Large scale wildfires and insect epidemics are of particular benefit to three-toed woodpeckers, providing important habitat components (snags for nesting and insects for foraging). Three-toed woodpecker presence within the allotments is probable.

**Columbia Spotted Frog** – This frog is not expected to occur in southeast Idaho (NatureServe 2014; USDA 2003b p. D-134). There are no documented observations of this species in Southeast Idaho (IFWIS 2014). Given the analysis area is outside the known range of this species, there will be *No Impact* to the Columbia Spotted Frog under any alternative. Since there



will be no Impact to this species there will be no Cumulative effects. This species will not be discussed further.

**Boreal (Western) Toad** – No documented recent observations (within the last 50 years) of Boreal Toads have occurred within or adjacent to the analysis area. Two historical accounts exist with the analysis area, a 1956 observation that occurred in the Blind Spring Draw area, and an 1894 observation that occurred in the Mink Creek/Lead draw area. While not specific to the Caribou National Forest, no Boreal Toads were observed during amphibians surveys to the east and south of the analysis area in 2012 (IDFG& BLM 2012 p. 6 Figures 8 and 9). Given the lack of recent observations within the analysis area, and that recent surveys adjacent to the analysis area did not observe any Boreal Toads, presence within the analysis area is not expected.

**Other Special Status Species and Species of Local Concern:**

**Northern Leopard Frog and other amphibians**- Suitable habitat (ponds, marshes, wet meadows) occurs within the project area. While there are no recent observations within the allotments, presence within the allotments is probable. A variety of locally common amphibians are also known or likely to occur within the analysis area, including Tiger Salamanders (*Ambystoma tigrinum*), and Boreal Chorus frog (*Pseudacris triseriata maculata*).

**Migratory Landbirds** – Livestock grazing activities will take place in habitat for migratory landbirds. Riparian areas, non-riverine wetlands, sagebrush and aspen woodlands are “priority A” habitats and conifer forested habitats/mountain shrubs are “Priority B and C” habitats (IWJV 2005), all important for nesting migratory landbirds. The Idaho Bird Conservation Plan (ID PIF Bird Conservation Plan 2000) identified Riparian, non-riverine wetlands, sagebrush shrublands, and Dry Ponderosa Pine/Douglas Fir/Grand Fir forests as the highest priority habitats for birds in Idaho. Important Bird Areas (IBA’s) are sites that provide essential nesting, migration, or wintering habitat for birds (IBT 2014). The Mink Creek/Cherry Springs IBA occurs within the analysis area, beginning at the Forest Boundary near Cherry Springs and continuing for about 15 road miles up the Bannock Highway and up towards Scout Mountain (maps and descriptions of the Mink/Cherry Springs IBA available in the project record). “Balancing recreational activities and domestic livestock grazing pressures with preserving and maintaining riparian/stream habitat” has been identified as an issue in this IBA (IDFG&G-CWCS Appendix H p.22). Multiple species of migratory landbirds were observed during passerine surveys within the analysis area (Colt and Austin 2012). Given the minimal impacts to upland areas, and the high importance of riparian areas to migratory birds, the trends in the conditions of riparian areas are of critical importance to migratory birds.

**Mule Deer and Elk**- The analysis area contains year round habitat for mule deer and elk. As described in the Wildlife DFC document, field reviews throughout the allotment (see Colt and Austin 2012, and Green 2012 field notes) indicate that upland and mountain brush habitat within the allotments are currently only minimally impacted by livestock grazing activities, while riparian areas have received higher levels of use. Riparian areas are critically important to big game both for foraging and reproductive activities. Given the minimal impacts to upland areas, and the high importance of riparian areas to mule deer and elk, the trends in the conditions of riparian areas are of critical importance to these species. The current conditions and trends of riparian areas can be directly tied to objectives in the State management plans for Mule Deer and Elk, therefore as described in the Wildlife DFC document, the current condition and trends of riparian areas is an indicator used in this analysis. As previously described, several streams within these allotments are in various stages of achieving PFC. Annual use indicators have also been a concern, as shown in Table 6 of the Hydrology Specialist report.

The analysis area is within Game Management Unit (GMU) 70, how GMU 70 and the analysis area relate to the larger scale Population Management Unit's (PMU) and Elk Management Zones is described below:

*Mule Deer*-The Pocatello-Midnight- Michaud allotments all occur within Game Management Unit (GMU) 70, Unit 70 occurs within the "Bannock Population Management Unit (PMU) (as described in the Mule Deer Management Plan). The Bannock PMU encompasses a large area, (6,470 square miles), and in addition to GMU 70, also includes GMU's 56, 57, 71, 73, 73A, 74, 75, 77, and 78. (It is important to note that the Pocatello-Midnight-Michaud allotments measure about 43, 840 acres or about 69 mi<sup>2</sup>, which is approximately 1% of the land area within the Bannock PMU, therefore while habitat within the allotments is obviously important in contributing to mule deer habitat, there are many other issues and land management activities, both federal and private, driving mule deer population trends within the PMU). Mule Deer populations are not meeting objectives within the Bannock PMU.

*Elk* – As described above, the Pocatello-Midnight- Michaud allotments all occur within Game Management Unit (GMU) 70, Unit 70 occurs within the "Bannock Elk Management Zone" (or Bannock Zone). The Bannock Zone is a large area encompassing 3,742 square miles, and in addition to GMU 70, also includes GMU's 56, 71, 72, 73, 73A, and 74 (IDF&G 2014). (It is important to note that the Pocatello-Midnight-Michaud allotments measure about 43, 840 acres or about 69 mi<sup>2</sup>, which is approximately 2% of the land area within the Bannock Zone, therefore while habitat within the allotments is important in contributing to elk habitat, there are many other issues and land management activities, both federal and private, driving elk population trends within the Bannock Zone). State Population objectives for "Cow Elk" and "Bull Elk" are currently being met within the Bannock Zone.

**Big Game Winter Range:** All three allotments contain areas of designated winter range, totaling about 9,700 acres. A variety of factors have resulted in the current condition of winter ranges within the allotment including historical grazing and wildfire suppression (USDA-FS 2010b). Currently several factors are further degrading the condition of winter range within the analysis area including conifer encroachment into aspen stands, replacement of mixed shrub and sagebrush communities by juniper, and human encroachment into winter range areas (including recreational activities and structural developments) (USDA-FS 2010b). Maple encroachment and presence of invasive species, primarily cheatgrass are other factors degrading habitat on winter range areas within the analysis area (Green 2012 Field notes). The invasion of cheatgrass is widespread throughout the west; the negative impacts of cheat grass are described in the "Habitat guidelines for mule deer Mule Deer-Intermountain West Ecoregion (MDWG 2009 page 15).

**Big Game Security Areas:** Big Game security areas are defined as an area of cover over 0.5 miles from an open motorized route and over 250 acres are important for limiting disturbance and hunting vulnerability to big game animals. Security areas have been mapped throughout all three allotments (maps located in the project record).

## Heritage Resources

### ANALYSIS METHOD:

For the purposes of this analysis, Caribou Forest Heritage Resources Project and Site records were used to determine previous heritage resource analysis and where archaeological and

historic resource locations are presently known. On-site pedestrian survey and archaeological testing were conducted in high site probability areas.

### **ANALYSIS AREA:**

The analysis area is the Pocatello, Midnight, and Michaud AMP Project Area.

Archaeological and ethnographic sources indicate the historic and prehistoric utilization of the project area for camping, hunting, fishing, gathering, grazing, mining, harvesting timber, and traveling. Archaeological investigations of known and as yet undiscovered cultural resources may offer insights into the historic and prehistoric land uses and settlement patterns of the area. Cultural resources may be identified as those resources either directly or indirectly related to the material life ways of a cultural group, or groups as specified by the Code of Federal Regulations (CFR), 36 CFR 296.3. Cultural resources may refer to sites, areas, buildings, structures, districts, and objects which possess scientific, historic, and social values. The significance or the National Register of Historic Places (NRHP) eligibility of cultural resources is determined by the Forest Archaeologist in consultation with the State Historic Preservation Officer (SHPO).

The predicted percentage of high and low cultural site probability acres is based on topographical landforms, slope percentage, and other associated natural features. The resulting estimations are subject to change as a predictive archaeological site location model is developed and refined. Evidence of historic ranching and mining activities are present throughout the area and will need further evaluation as time and/or site specific projects dictate. Cultural resource site locations are not disclosed in this document. In order to protect and preserve cultural resources, detailed description and locations are exempt from disclosure under the Freedom of Information Act as stated in the Forest Service Policy (FSH 6209.13, Section 11.12) in accordance with the Archaeological Resources Protection Act (ARPA) of 1979 (16 USC 170hh) and the National Historic Preservation Act (NHPA) of 1966 (16 USC 470w-3). Such information is disclosed in full to the SHPO in order to facilitate decisions on sites which should be included on the NRHP, or which sites should be designated as significant. Notification and involvement of the Shoshone-Bannock Tribes and Eastern Shoshone of Wind River Reservation concerning Native American cultural resource matters has to be carried out as specified by the Code of Federal Regulations 36 CFR 296.7, 36 CFR 800 Section 101(d)(6)(B) and in accordance with Presidential Memorandum concerning Government-to-Government Consultation signed April 29, 1994.

### **Tribal Treaty Rights and Trust Responsibilities**

#### **Analysis Area**

The analysis area is the Pocatello Midnight Michaud Project Area.

#### **Analysis Method**

This analysis used data from the following sources:

- The following information is from “Shoshone-Bannock Tribes” published by the Shoshone-Bannock Tribal Cultural Committee and Tribal Elders.

The Shoshone-Bannock Tribes are headquartered at the Fort Hall Reservation, in Southeast Idaho. The current reservation boundary encompasses about 544,000 acres of land along the Snake River. The original reservation totalled over 1.8 million acres but due to the expansion of white settlers, Congress required the Tribes to cede much of this land. The Tribes did, however, retain grazing rights on those ceded lands. Much of the Westside District of the Caribou-Targhee National Forest is in those ceded lands. The Fort Bridger Treaty established off-reservation treaty rights on all unoccupied lands. These rights include hunting, fishing, gathering, and other practices such as trade. While the Treaty itself only specifies hunting, the lawsuit “State of Idaho v. Tinno” established that any rights not specifically given up in the Treaty were, in fact, reserved by the Tribes. Further, in the Shoshone language, the same verb is

used for hunt, fish, and gather, so it is assumed that the Indians expected to retain rights for all of those practices (Smoak 2004, From a presentation at the Shoshone-Bannock Tribes, 1868 Fort Bridger Treaty Rights Seminar: April 12-13, 2004).

The Caribou-Targhee is also part of the ancestral homeland of the Northwest Band of the Shoshoni. In their 1863 Treaty they assented to the Fort Bridger Treaty. Chief Pokatello claimed the area from Raft River to the Portneuf for himself and his people. Thus, tribal members of the Northwest Band also have rights to hunt, fish, and gather on all unoccupied lands of the United States.

Prior to white settlement of the west, the Shoshone and Bannock peoples were comprised of many smaller nomadic bands inhabiting a vast area of the west. Their aboriginal territory includes six states and ranged north into Canada and south to Mexico. The bands were generally extended family groups who moved across the western landscape hunting, fishing, and gathering with the changing seasons. The Fort Hall area was a traditional wintering area for many of the bands. In addition to digging camas bulbs, many bands met on the Camas Prairie for trade events each spring. The Caribou-Targhee National Forest was an integral part of the Shoshone Bannock Tribes ancestral lands.

Few “traditional use sites” have been documented through consultation with the Tribes. This is due mostly to privacy issues. For this analysis, we assume that the project area was, and is, used for traditional practices such as hunting, fishing, and gathering. We also assume that tribal members utilize the project area for traditional activities such as ceremonies and religious practices. To protect the privacy of the Tribes, these activities will be discussed and analyzed in general terms.

Spirituality and religious ceremonies have always played a significant role in Indian cultures. Natural resources played an integral part of these ceremonies. Items such as sweet sage and tobacco made from a variety of plants were and are used in ceremonies. The Indians gathered many plants for medicinal purposes, including chokecherry, sagebrush, and peppermint. A myriad of other plants were gathered for food and to provide shelter. Rocks and clays were also used for ceremonies, ornamentation, and shelter. Some bands inhabiting the upper Snake region were known as the “sheepeaters” since bighorn sheep were a staple of their diet. Buffalo, elk, deer, and moose were also hunted and used by the aboriginal people. The Shoshone and Bannock bands also relied on upland game birds and small mammals. Salmon fishing was an integral part of aboriginal culture. Geysers, thermal pools, and other water features were also utilized heavily by the Shoshone-Bannock Tribes.

These activities are still practiced today across the Forest and Grasslands although the extent of those activities is unknown. Many tribal members hunt, fish, and gather for subsistence and to maintain their traditional way of life. Forest Service managers have a responsibility to insure that the resources continue to support these traditional tribal uses.

## Chapter 4. Environmental Consequences

### Introduction

This chapter provides information concerning potential consequences to the environment. It also presents the scientific and analytical basis for the comparison of alternatives presented in Chapter 2. In Chapter 3, each resource potentially affected by the proposed action or alternatives is described by its current condition and uses. These resource descriptions also include descriptions of and reasons for the spatial and temporal boundaries of cumulative effects analyses.

Each significant issue has a discussion of the potential effects (environmental consequences) to the resource associated with the implementation of each alternative. All significant or potentially significant effects, including direct, indirect, and cumulative effects, are disclosed. Effects are quantified where possible, and qualitative discussions are also included. The means by which potential adverse effects will be reduced or mitigated are described (see also Chapter 2).

The discussions of resources and potential effects take advantage of existing information included in the Revised Forest Plan's FEIS (2003), project-specific resource reports and related information, and other sources as indicated. Where applicable, such information is briefly summarized and referenced to minimize duplication. The project record includes all project-specific information, including resource reports, the watershed analysis, and other results of field investigations. The record also contains information resulting from public involvement efforts. The project record is located at the Westside Ranger District Office in Pocatello, Idaho, and is available for review during regular business hours. Information from the record is available upon request.

**Analyzing Effects:** Environmental consequences are the effects of implementing an alternative on the physical, biological, and social environment. The Council on Environmental Quality (CEQ) regulations implementing the National Environmental Policy Act (NEPA) include a number of specific categories to use for the analysis of environmental consequences. Several are applicable to the analysis of the proposed project and alternatives, and form the basis of much of the analysis that follows. They are explained briefly here.

**Direct, Indirect, and Cumulative Effects:** Direct environmental effects are those occurring at the same time and place as the initial cause or action. Indirect effects are those that occur later in time or are spatially removed from the activity, but could be significant in the foreseeable future. Cumulative effects result from incremental effects of actions, when added to other past, present, and reasonably foreseeable future actions, regardless of what agency or person undertakes such other actions. Cumulative effects can result from individually minor, but collectively significant, actions taking place over a period of time. Cumulative effects analysis involves assumptions and uncertainties. Cumulative effects analysis provides the opportunity to evaluate future Forest management options in the context of other developments in the analysis area. Much of the information on current activities was obtained from the Caribou Adjacency Analysis (Caribou NF 2001).

The ID Team identified the past, present, and reasonably foreseeable future actions within the analysis area. Chapter 3, Specialist Reports (2013 and 2014), Affected Environment and the Caribou Adjacency Analysis (2001) provide more specific information regarding many of the actions shown below.

## **Past Actions**

- Elk have increased in the analysis area.
- Natural fires have occurred over time within the analysis area. The majority of the project area was burned over by wildfire in the latter part of the 19<sup>th</sup> century.
- Vegetation succession, wildfire suppression, and weather events have shaped plant communities.
- Insect and disease activity has persisted in forested stands throughout recorded time. Primary insect and disease problems within the project area include mountain pine beetle (lodgepole), Douglas fir beetle (Doug fir), and dwarf mistletoe (lodgepole and Douglas fir).
- Blowdown has occurred in forested stands.
- Drought cycles, most notably in the 1930s, and early 1990s have occurred.
- Timber has been harvested on about 683 acres in the past.
- Roads and trails have been constructed in parts of the project area.
- Hunting and fishing has and continues to occur in the area.
- Recreational use has increased and use patterns have changed. Motorized technology has changed. Huckleberry harvesting is also increasing in the area.
- Prescribed fire (185 acres) and chemical treatments (approximately 1,000 acres) have affected vegetation.
- Subdivisions (e.g. Trail Creek) have been developed adjacent to the Forest, in critical big game winter range.
- There are outfitter and guide permits under special use permits.
- Noxious weed invasion, carried by wind, humans, machinery, and animals has occurred.
- Domestic livestock have grazed most of the area.
- Wildfires have been suppressed over the past ninety years.
- Management actions have removed, eroded, and compacted soils, and in localized areas have reduced soil productivity, both short- and long-term.
- Paleontological investigations and research have occurred.

## **Present Activities**

- Insect and disease activity persists in forested stands.
- Vegetation succession, wildfire suppression, and weather events are shaping plant communities.
- Drought cycles continue to influence vegetation communities.
- Wildfires occur - 3,370 acres.
- Coordination with the Shoshone-Bannock Tribe is continuing to insure land management decisions and activities do not affect treaty rights.
- Timber harvest is continuing on the Forest but at a reduced level when compared with the last 15 years.

- Road construction in association with timber harvest continues on the Forest, but like harvest, it is occurring at reduced levels.
- Livestock grazing continues to occur. A total of 5,941 Head Months currently are available for cattle grazing.
- Recreation, including ATVs, snowmobiles, hunting, camping, and wildlife viewing, is available and will continue to increase as the population grows.
- Hunting and fishing continues to occur in the area.
- Access is being restricted to the National Forest by some private landowners.
- Water quality limited streams have been identified on the Forest.
- All wildfires are being suppressed because of the risk to resource values, private property, and human safety.
- Several important archeological sites have been discovered, and archeologists and other interested individuals, locally, regionally, and nationally, are participating in the Passport-In-Time Program to document and protect these sites.
- Water developments (existing condition Range Specialist report) and water diversions are in place (see past actions).
- Declining populations of some species of fish and wildlife in the West continue to receive increased Federal and State agency conservation efforts.
- Subdivision development continues adjacent to the Forest.
- Prescribed fire is being used as a vegetation management tool on the Forest.
- Noxious weed invasion continues. One Cooperative Weed Management Group is established within this project area.
- A shift in management emphasis and implementation of Best Management Practices has reduced soil impacts from timber harvest, mining, road construction, and livestock grazing. Impacts to soils have increased from recreational activities and noxious weed spread. Localized areas of short- and long-term soil productivity loss continue to occur.

### **Reasonably Foreseeable Actions**

- Insect and disease activity will continue in forested stands.
- Vegetation succession, wildfire suppression, and weather events will continue to shape plant communities.
- Coordination with the Shoshone-Bannock Tribe will continue to insure land management decisions and activities do not affect treaty rights.
- Timber harvest will continue into the future.
- Hunting and fishing will continue on the Forest.
- State of Idaho Department of Environmental Quality will establish Total Maximum Daily Loads (TMDLs) for all 303(d) water quality limited streams within the next 5 to 10 years.
- PM 2.5 standards are likely to be set by EPA under the Clean Air Act.
- Use of prescribed fire and wildfire for resource benefits are expected to increase. This may impact soil and water resources.



- As development adjacent to the Forest occurs, special use permits for water transmission lines may be requested.
- Potential listings under the Endangered Species Act may occur within the 10-year plan period if populations of selected species continue to decline.
- Recreational use will continue to increase into the future and use patterns will change with changes in the population and technology.
- An increase in the use of developed recreational sites and campgrounds is likely as the population increases.
- OHV use is likely to continue to increase due to changes in the population and technological advances.
- Access to the National Forest is likely to be increasingly restricted by private landowners.
- Subdivision development will continue adjacent to the Forest.
- Noxious weed invasion in the project area will continue into the future. Noxious weed abatement efforts will increase.
- The impacts on soils from recreational activities will increase.

**Available Information:** There is less than complete knowledge about some of the relationships and conditions of wildlife, fish, forests, jobs, and communities. The ecology, inventory, and management of a large forest area are a complex and developing science. The biology of wildlife species prompts questions about population dynamics and habitat relationships. The interaction of resource supply, the economy, and communities is the subject matter of an inexact science. However, the basic data and central relationships are sufficiently well established in the respective sciences for the deciding official to make a reasoned choice between the alternatives, and to adequately assess and disclose the possible adverse environmental consequences. New or improved information would be very unlikely to reverse or nullify these understood relationships. In addition, when analyzing the effects of this project, there is the advantage of directly observing the effects on all resources from 100-plus years of varying grazing intensities.

**Plans of Other Agencies:** The CEQ regulation implementing NEPA requires a determination of possible conflicts between the proposed action and the objectives of Federal, State, and local land use plans, policies, and controls for the area. See the “Findings and Disclosures” section at the end of this Chapter for a discussion of compliance with these laws. State compliance is also discussed.

## Water Resources

Hydrologic and aquatic resources have been influenced by historic and recent livestock grazing. The long-term trends of reducing livestock numbers, along with improved grazing management have surely improved stream channel, riparian, water quality, and watershed function over time. In some areas like Walker and Kinney Creeks, recent actions of rest and improved livestock management have led to streambank stability improvements. In other areas like South Fork Mink Creek in the Catch Unit, riparian conditions have improved since measures were taken in the 1990's, but current livestock management is impeding full achievement of DFCs and the trend is static. And in a few areas like Crystal and Indian Creeks, excessive streambank trampling by livestock has caused conditions to be degraded.

Predicting the effects of grazing management is challenging because the outcome greatly depends on how well we follow our own plans. That said, the scientific literature is clear: if we follow the recommended BMPs and riparian use standards closely, conditions will improve.

**MECHANISMS FOR WATER RESOURCE EFFECTS:** Beneficial use support is directly tied to the physical characteristics of the channel; the amount, type, and vigor of streamside vegetation; and the quality and quantity of water. Livestock affect these variables directly, indirectly, and cumulatively. Direct effects include the removal of overhanging vegetation and the trampling of stream banks. Indirect effects include increases in sediment (related to bank damage), flow alterations (increased overland flow), and temperature (related to reduced stream bank vegetation). Cumulative effects result from the incremental addition of a pollutant to existing or other sources. They also occur when different processes are additive. An example would be if grazing resulted in unstable banks and then timber harvest increased peak flows. The cumulative effect could be excess bank erosion and an increase in sediment production.

**Riparian Condition:** Properly functioning riparian areas are critical in maintaining healthy and diverse aquatic systems. Riparian grazing can affect the channel and water quality in the following ways: (1) changing the species composition of bank vegetation, (2) reducing the amount of floodplain and bank vegetation, (3) decreasing shading, (4) decreasing plant vigor, (5) reducing inputs of fine organic material, (6) reducing sediment and nutrient filtration, (7) eliminating riparian plant communities by lowering the water table, and (8) altering the quality and quantity of fish cover.

**Stream Condition/Function:** Grazing affects stream condition and function in three main areas: the banks, the channel, and the water column. Potential effects on the banks include; (1) sloughing by hoof and head action, (2) water and ice erosion of exposed banks, (3) elimination or loss of bank vegetation, (4) reduction in the quantity and quality of bank undercuts, and (5) increasing the bank angle. Channel effects include changes to the stream's shape or dimensions and an altering of sediment transport processes. Finally, effects to the water column include: (1) lowering the water table, (2) changes in organic and inorganic inputs, (3) increases in fecal contamination, (4) changes in the timing and magnitude of stream flow events, and (5) changes in stream temperature.

**METHODS AND ASSUMPTIONS USED TO ASSESS EFFECTS:** The assessment estimated what the most likely future conditions would be (for riparian areas and streams) by evaluating the trends estimated for each alternative. This was accomplished by using a qualitative combination of channel type and condition, riparian type and condition, the proposed grazing system, and allowed utilization levels. It's assumed that a trend analysis would address the majority of direct and indirect effects to stream channels and water quality. For example, if a reach has a declining or static trend we'd expect sediment production (or nutrient, bacterial, and thermal inputs) to continue at or exceed current levels. Using the same logic, if trends were improving we'd expect lower levels of these pollutants. The estimated increase or decrease, along with the existing condition of the receiving stream, would then be used to estimate potential effects to beneficial uses.

Analysis also considered stream type, as described by Rosgen (1994). Both Rosgen and Myers and Swanson (1992) point out the importance in evaluating grazing impacts by stream type.

**General Background:** Proper grazing may co-exist with sustainable riparian systems (Larsen, 1998; Elmore & Kauffman, 1994; Buckhouse, 2000; Armour, *et al.*, 1994), or even in some cases is beneficial for plant density and vigor, which assists in stabilizing soil, slowing erosion and decreasing in-stream sediment (WDEQ, 1997).

While Platts found that no grazing scheme would improve a damaged riparian area better than rest, he did find that habitat alterations were insignificant when riparian forage utilization stayed at or below 25% (Platts, 1981). Other studies (summarized in Leffert, 2002, the GIG) found minimal vegetative impacts at 30% use. Therefore, utilization rates below 30% are assumed to be consistent with a rapid improvement rate. Since willow use was found to begin when herbaceous utilization reached 45% (Clary and Webster, 1989), limiting utilization to this level would allow willow recovery of degraded sites. Eventually it is assumed that shrub production would be high enough that all sites capable of supporting shrubs could eventually become occupied. This would begin the “fencing” function that shrub communities provide when in good ecological condition and long-term bank damage would be low. Therefore, utilization rates of 30-45% are assumed to be consistent with a moderate rate and a substantial amount of recovery. Finally, since utilization rates from 45-65% would still be expected to provide some improvements in bank stability and water quality (Mosley *et. al.*, 1997), it is assumed to provide a slow rate of improvement. In these cases the survival of new shrub seedlings would be limited. At the 65% use level bank damage levels would remain at the current levels since additional bank protection would not occur. Therefore, banks damaged by prior grazing would continue being affected year after year.

**Direct and Indirect Effects:** *All Alternatives* – Livestock grazing could occur under any alternative selected due to the Tribal treaty rights held by the Shoshone-Bannock Tribes. Therefore, all alternatives would be subject to the recommended BMPs.

BMP effectiveness is dependent on proper and consistent implementation and maintenance of the BMPs (Mosley *et al.* 1999); this is especially true with livestock grazing since it is a continuing annual disturbance. The Forest has monitored BMP implementation and effectiveness on several grazing allotments since 2004. When properly and consistently applied year after year, grazing BMPs have been found effective at protecting water quality and minimizing erosion on this Forest (Caribou-Targhee NF, 2004-2013) and other areas (Benneyfield 2002). Failure to properly implement BMPs (e.g. overuse of riparian vegetation, excessive streambank trampling) results in impacts to stream health & aquatic resources (McInnis & McIver 2009 & Saunders & Fausch 2007). Proper rangeland administration, whether permitted grazing or treaty rights grazing, will be the key to achieving and maintain desired conditions across the allotments.

The riparian use standards are meant to limit the amount of time livestock spend in the riparian. Proper implementation of these standards is meant to protect surface water quality. It is expected that by meeting surface water quality standards, the Forest will also meet groundwater protection measures.

**Alternative 1**– Discontinuation of permitted grazing would remove permitted livestock as a source of streambank and vegetation disturbance, sediment, and nutrients to waterbodies. Existing streambank stability and water quality conditions would greatly improve as areas with disturbed streambanks recover, especially if the Tribes do not exercise their treaty grazing rights.

Alternative 1 does the most to protect and improve watershed conditions. The entire West Fork Mink Creek Municipal Watershed and prescription 4.3(b) would be excluded from livestock

grazing.

**Alternative 2**— Continued permitted livestock grazing within the allotments would be managed to maintain or progress towards desired conditions (e.g. >80% stable streambanks, late ecological status, and greenline stability). The use of annual indicators (e.g. bank alteration, stubble height, and/or riparian forage and woody species utilization), adaptive management, and other BMPs, as needed, would maintain or improve the existing stream channel, streambank, and riparian health and function. Existing streambank stability and water quality conditions would slightly improve as disturbed areas continue to recover. Given the high recovery potential, riparian areas are expected to mature in ecological status. Water quality is also expected to improve slightly as criteria to move towards desired conditions would be applied as necessary (i.e. adaptive management). Livestock management would focus on the maintenance or progression (if needed) toward desired conditions within riparian areas.

**Alternative 2** does the most to protect and improve watershed conditions while allowing for permitted livestock grazing. The entire West Fork Mink Creek Municipal Watershed and prescription 4.3(b) would be excluded from grazing.

**Alternative 3**— The adaptive management criteria to exclude livestock grazing from the municipal watershed and 4.3(b) prescription specifies a lot of monitoring. Review of past grazing NEPA documents that specify a large amount of monitoring shows that the monitoring typically does not occur as specified (Higginson 2010). However, regardless of the monitoring data, this alternative delays the fencing of the municipal watershed and 4.3(b) prescription. It is unknown how effective the adaptive management approach would be.

**Alternative 4**— Alternative 4 does the most to improve riparian areas with declining trends in a timely manner. This includes Indian, Crystal, and South Mink (Catch Unit) Creeks.

### **Cumulative Effects:**

**Alternative 1:** Discontinuation of permitted livestock grazing would result in greater improvements of streambank stability, water quality, and overall riparian health within the analysis area. Continued implementation of the RFP direction would maintain progress toward desired conditions for riparian resources. Given the direct and in-direct effects of this alternative, and when considered with past, present, and foreseeable future projects, the no-action alternative would greatly improve watershed conditions within approximately five years.

**Alternatives 2, 3, and 4 :** Livestock grazing in the allotments would be conducted in compliance with RFP standards and guidelines and other BMPs. These measures would maintain and slightly improve water quality and the health and function of riparian areas. Grazing would result in negligible cumulative effects within the analysis area. Given the limited direct and in-direct effects of the proposed action, and when considered with past, present, and foreseeable future projects, the proposed action would slightly improve watershed conditions within ten to fifteen years. Proper range permit administration would be the key to achieving DFCs across the allotments.

## Rangeland Health

### *Factors Common to All Alternatives*

#### **Direct and Indirect Effects**

The direct effect of livestock grazing is the removal of plant cover; this is usually a temporary impact. Indirect effects of livestock grazing on plant community composition are alteration of the microenvironment and fire return intervals, and influence on ecosystem processes such as nutrient cycling, energy flow, and the water cycle (Miller 1994). Community alteration can occur if selective grazing pressure occurs on a species mix. Some positive effects of controlled grazing are loosening of the soil surface by livestock hoof action during dry periods to increase infiltration, incorporation of mulch into the soil profile, maintaining an optimal leaf area index of plant tissue, incorporation of seeds into the soil by trampling, and recycling of nutrients making some nutrients more available for plant use (Holechek 1980). Effects include:

- Intensity (amount of plant removed) and frequency ( number of times a plant is grazed)
- Season of use (time of grazing)
- Competition
- Site characteristic(s)
- Species- (e.g. rhizomatous and stoloniferous plants tend to be more tolerant of grazing than bunchgrasses)

Within Forested Vegetation, there is no difference between alternatives (Forester Report 2014). The project area is outside Desired Future Conditions (DFC) outlined in the RFP with respect to forest structure. The district has been successful under the existing allotment plans at moving forest structure from mature/old to seedling/sapling structure classes to address this need. That is harvest and burn units have been successfully regenerated or failure has not been attributable to livestock. Direction incorporated into all alternatives is adequate to insure that failure is not attributable to livestock. There is also no difference between any of the fully developed alternatives, with respect to forest vegetation species composition. Succession will continue, with or without grazing, early seral species (such as aspen) will continue to be replaced by late seral and climax species.

Within the non-forest vegetation, current conditions, as disclosed in Chapter 3 and Specialists Reports, majority of cover types are rated as Functional-at-risk. Historical grazing and artificial seeding of non-native grasses have impacted the project area. The presence of cheatgrass and other annual grasses will exist with or without grazing by domestic animals; changes in grazing levels are not likely to have a measureable change in the frequency or cover of these annual grasses, especially on south-facing hillside where the presence of these species are pronounced and grazing by cattle tends to be minimal – cattle are most likely to concentrate in the less-sloping portions in the 10-30 percent slope range. Opportunities may exist to change the timing and level of grazing in these areas to reduce the level of grazing in areas where cattle tend to congregate more, such as meadows and riparian areas.

Sagebrush and Mountain Brush types (at the landscape level) were considered outside desired future conditions (DFC) outlined in the RFP with respect to canopy cover mix. Some literature describes big sagebrush as an “increaser species” that has expanded on the landscape in response to historical grazing practices that may displace herbaceous vegetation and produce an excessive

shrub canopy.

Many noxious weeds are often opportunists, and many are pioneer, colonizing species. They are frequently one of the first species to arrive and colonize areas that have experienced soil-surface disturbance or that lack plant cover. Their establishment and spread is aided by disturbance to the soil surface. These “colonizers” are typically prolific producers of disseminules and often are adapted to long-distance dispersal by means of vehicles, wind, wildlife, livestock (livestock may behave as an agent capable of spreading noxious weed seed attached to hair, and/or muddy hooves), water, or machinery. They usually germinate under a wide variety of conditions, establish quickly, exhibit fast seeding growth, and out-compete native species for water and nutrients. These “colonizer” species may invade certain cover types, found within the project area, successfully because high intensity or frequency of disturbance impacts the soil surface or removes the normal canopy cover. Livestock may also behave as an agent capable of spreading noxious weed seed attached to hair and/or muddy hooves. Some noxious weeds have a high nutritional value and many of these are eaten by livestock. Grazing and/or trampling usually does not kill the plants, but it does reduce the energy reserves in the roots and well-timed grazing can prevent seed production and stimulate more desirable plant species.

All of the alternatives contain the following features: 1. forage utilization standards which limit the intensity and frequency of the plant/browse removal, which is considered to be “moderate” (RFP FEIS 4-134); 2. Continuing efforts would be made on existing noxious weed infestations through implementation of the Noxious Weed Strategy. All of these factors are expected to improve both short-term and long-term vegetation productivity and move the vegetative resources toward desired future condition.

### **Cumulative Effects for All Alternatives:**

The cumulative effect area is the vegetation resource within the project area. In all alternatives, rangeland vegetation cover types are influenced by the following disturbances:

- Fire, insect disease, and noxious weed infestations
- Physical disturbances such as dispersed camping, road and trail use, and wildfire
- Climatic cycles
- Cultural treatments

These stress all influence plant growth, composition, structure and function. In addition past range non-structural improvements (spraying, plowing, trenching, and seeding) have impacted the project area to a lesser degree; aerial/artificial seeding of introduced species such as bulbous bluegrass, orchard grass, smooth brome, and meadow foxtail are represented across the project area (Specialist’s reports). Disturbance-induced condition, as described in factors common with all alternatives, exist on some areas. Return to original conditions on these occurrences will be very slow, not within the temporal scope of this analysis. Natural succession, wildfire suppression, drought cycles, recreational activities, and noxious weed invasions impact rangeland health indicators and grazed-induced species and structure.

Past fire suppression activities have been effective in limiting the spread of fire across this landscape. As a result, the nature of these types will remain or continue towards even-age

structure and outside the range of natural variability. The over-representation of the mature/old structure class is another way to say the landscape lacks diversity. As stands move toward maturity, plant species diversity decreases, and climax shade-tolerant species such as sub-alpine fir begin to dominate. Without disturbance this trend will continue, which in the long-term could affect all resource management within the project area. For example, as succession continues, acres of capable range would decrease (e.g. cover type will change from aspen/conifer to conifer). Additionally, these types will remain or become more decadent and susceptible to insects and disease. Fire intolerant species and those species more tolerant but outside their specific habitats would continue to encroach into other cover types. Patterns of different age classes and distinct cover types will be more homogenous and the diversity of species will be lower. This rate of change appears to be rapidly increasing over-time (Specialist Reports 2014, Forester/Fuel Report 2014).

Historical fire frequencies have been interrupted such that the absences of natural wild fire across the rangeland setting have altered structure and species composition. The annual production of herbaceous material would provide fine fuels in the various rangeland cover types. The accumulation of fine fuels would increase the probability of ignition; enhance fire intensity, and aide the rate and extent of spread of fire across the landscape. Given an ignition source with no suppression, the age class of these types would convert to an uneven age structure over time and approach the range of natural variability at a much more rapid rate. Additionally, this structure would reduce the amount of decadence and the susceptibility to insects and disease. Fire intolerant species and those species more tolerant but outside their specific habitats would be eliminated and/or confined to their respective habitats. Patterns of different age classes and distinct cover types will be more heterogeneous and the diversity of species will increase. This rate of change would be variable depending on cover type and site conditions.

Other disturbances within the project area that contribute to the establishment and expansion of noxious weeds include disturbance from roads and trails, and prescribed burning activities, disperse recreation (camping, hunting, scenic drives, ATV travel, horseback riding and hiking). Many dispersed camping sites exist along the roads/riparian areas. Therefore, using the worst case scenario displayed in the cumulative AIZ acreage available (Hydrologist report), approximately 3,368 acres potentially be at increased risk of noxious weed invasion. Noxious weeds that have become established often expand onto adjacent sites. Livestock, big game, and other wildlife species such as birds and rodents may contribute to expansion of noxious weeds (Sheley 1999).

## **Alternative 1-**

### **Direct and Indirect Effects**

Once livestock grazing is phased-out, there would be short-term rapid improvement in area where cattle tend to congregate (i.e. increase ground cover because there would be more litter). Grazing-induced seral state and structure altered communities would continue to be somewhat slower on certain sites due to the persistence of competitive species. Long-term resting (not grazed) an area is clearly advantageous compared to detrimental grazing practices, less clear is showing differences between long-term rest (ungrazed) and properly managed grazing (Davies et al 2014). One common theme found by Davies and others (2014) when synthesizing the scientific literature on long-term rest in the sagebrush steppe is that shifts in plant communities (i.e. exotic annual grass invasion and juniper encroachment), caused in part from historical detrimental grazing practices, cannot be reversed by long-term rest. There would be a reduction of 5,941 permitted Head Months.



In regard to potential increased risk of noxious weed invasion and spread, approximately 2.5 acres or 0.005 percent of the project area may be at risk of noxious weed infestation.

If the tribal grazing occurs, the grazing strategy and proper-use of key species would remain the same as prescribed in each of the Allotment Management Plans and modified by Table 4-1 in Revised Forest Plan. As a result of the past adjustments in season of use and number of livestock, the majority of rangeland cover types are Functional to Functional-At-Risk (Range Specialist Report 2014). Ground cover results and trends would remain the same as current conditions. Riparian forage utilization standards would improve riparian conditions. Within the temporal scope of this analysis, past non-structural improvement activities are expected to remain static. No livestock grazing would occur within Forest plan prescriptions 2.1.3 (b) and 4.3(b). Fence would be constructed and realigned to exclude livestock. Along with Tribal representative, An IDT would be conveyed to determine the need for range structural improvements.

## **Alternative 2**

**Direct and Indirect Effects:** The majority of rangeland cover types are rated Functional-at-risk. These sites will continue to advance along their respective successional pathways; however, this alternative will most likely affect the rate at which some sites recover (Laycock 1989 and Miller 1994).

No livestock grazing would occur within Forest plan prescriptions 2.1.3 (b) and 4.3(b). Fence would be constructed and realigned to exclude livestock. Vegetation effects would be similar to Alternative 1 within the no grazing prescriptions. Current rangeland monitoring studies are rated as functioning; rangeland condition ratings would remain functional. With the loss of acres, there would be a reduction of 1,098 permitted Head Month (Range Specialist Report 2014).

Depending on range conditions, livestock grazing season of use within the project area would occur from May 15 to October 11. No additional permitted grazing would be authorized. Because of the cooler temperatures, it is expected that the early season use would allow livestock use on the south-facing slope. It is also expected livestock would use the annual grasses and this would benefit competition in favor of the perennial grasses. Forage utilizations are applied to the units based season of use. Livestock forage use is also measured at the end of the grazing period, not the grazing season.

Changes to structural range improvements are being proposed such as, moving the water developments out of AIZ, reconstructions, and additional fence construction and reconstruction. The proposed structural improvements would improve livestock distribution and lessen the livestock impacts to riparian areas. The location of water developments on rangeland is important in controlling the movement, distribution, and concentration of livestock (Vallentine, 1989). By providing alternative water sources in the upland, livestock travel less to natural water sources where they will graze riparian vegetation while drinking water. This allows increased utilization of the upland vegetation, and thus a more uniform utilization of the forage available. However, the disturbance caused by these improvements may increase the potential risk of noxious weed invasion to 7.9 acres or 0.006 percent of the project area. It is also recognized there would be an additional temporary reduction of 433 Head Months while fences are constructed within the East side of the project area (e.g. Walker Creek).

Long-term and short-term vegetation production is expected to improve towards meeting Desired Future Condition as described in Chapter 1. Overall, riparian and upland conditions are

expected to improve (more detail is located in the Hydrologist Report 2014, and Specialist Reports 2014).

### **Cumulative Effects**

With Alternative 2, the potential risk of noxious weed invasions from cumulative impacts (existing condition, existing and proposed water developments, logging activities, wildfire and prescribed fire activities, and dispersed recreation) is approximately 3,370.5 acres or 0.07 percent of the project area.

### **Alternative 3**

**Direct and Indirect Effects:** Alternative 3 differs from Alternative 2 with the implementation of adaptive management strategy to exclude livestock grazing within Forest plan prescription 2.1.3 (b) and address recreation livestock conflicts and livestock grazing would be excluded within the 180 acres along the South Fork of Mink Creek Pine Plantation. Adaptive management measures outlined within Chapter 2 would prescribe livestock management restrictions and actions to implement if monitoring data illustrates the need. The following includes: The best case scenario, less fence constructed would be needed to exclude livestock from Forest plan prescription 2.1.3 (b) and recreation/livestock conflict; 2. The worst case scenario, the fence construction location construction would be delayed.

Alternative 3 also differs from Alternative 2 with a change to Forest Plan livestock grazing suitability within Forest plan prescription 4.3(b). Acres within 4.3 (b) prescriptions would be considered suitable to livestock grazing. Livestock grazing would be excluded within Pine plantation disperse camping site. Other disperse camping conflicts would be address with adaptive management measures.

**Cumulative Effects:** The potential risk of noxious weed invasions is the same as Alternative 3

### **Alternative 4 -**

**Direct and Indirect Effects:** Alternative 4 is similar to Alternative 3 with the following exceptions:

1. No adaptive management measures would be implemented.
2. More restrictive riparian management

The effects are the same as Alternative 3 with the following exceptions: no delay in fence location and riparian conditions would improve rapidly.

### **Cumulative Effects**

The potential risk of noxious weed invasions is 3,375 acres.

## Recreation

**Effects Common to All Alternatives:** All alternatives would improve existing ROS settings and scenery in riparian areas, traditional loafing areas, along trails and within Elk Meadows. The presence of livestock within any forest area has the potential to adversely effect the setting and scenery under some conditions, during some periods of time for some recreationists. In the long-term, all alternatives would improve recreation settings and expereinces and surrounding scenery as landscape conditions, especially in riparian areas, improve with new grazing implementation guidelines. Recreation settings and scenery of the project area will continue to be affected by a variety of recreation uses, and at times over-use and/or crowding; drought conditions, espeically within South Fork and noxious weeds in and around travelways, trailheads and developed/special use recreation sites.

All action alternatives have the potential to improve the recreation settings within the analysis area. The prescribed ROS settings and VQOs at most times and within most areas are met for the recreating public, now and under all alternatives. For some people the presence of livestock will have a negative effect on their recreation experience. For some people the presence of livestock does not have a negative effect on their recreation experience. Dry conditions late in the grazing season negatively affect the recreation experience for some dispersed campers and some trail users. In some cases, livestock use and presence may or may not affect this late summer drought setting. Other forest conditions and uses affect recreation settings and scenery. They include other recreationists, noxious weeds, drought, insects and disease, facility disrepair and trail conditions not meeting standard.

**Alternative 1:** This alternative would eliminate permitted grazing within the entire analysis area, which has the potential to improve recreation settings in and around developed areas, permit areas, dispersed camp areas and along roads and trails. Tribal treaty grazing could still occur. Tribal grazing and associated activities could affect recreation settings and visual quality depending on the nature of grazing, its location and numbers. This alternative does not include tribal grazing within the municipal watershed prescription area or within prescription areas managed under 4.3 dispersed camping management; most of East Mink drainage and high-use camp areas of South Fork of Mink. Livestock exclusion in these areas along with the new implementation guidelines for grazing has the potential to improve recreation settings and forest scenery in the short-term (2017) and long-term. This alternative meets the RFP for areas managed under the 2.1.3, 4.1 and 4.3 prescriptions.

**Alternative 2:** This alternative fences livestock from a majority of the dispersed camp areas in the analysis area ( Prescription Areas 4.3b) along with the entire 2.1.3 prescription area ( Elk Meadows). This alternative has the potential to improve recreation settings and visual quality in dispersed camp areas and along roadways and trails with E. Fork and S. Fork of Mink Creek and Elk Meadows. Improvements in setting and visual quality would occur in the short-term within these prescription areas (2017). Some livestock impacts could still occur outside these prescription areas in Kinney Creek, Valve House, Walker Creek and Goodenough Creek. This alternative meets the RFP for areas managed under the 2.1.3, 4.1 and 4.3 prescriptions.

**Alternative 3:** This alternative has the potential to improve recreation settings and visual quality in dispersed camp areas and along roadways and trails in most areas of noted livestock/recreation interface. Improvements in setting and visual quality would occur in the long-term as adaptive management strategies are implemented (2019). This alternative does not meet the RFP for areas managed under the 4.3 prescription in the East Fork of Mink Creek. A Forest Plan amendment to change “suitability” mapping for this prescription would be required.

**Alternative 4:** This alternative has the potential to improve recreation settings and visual quality in dispersed camp areas and along roadways and trails in most areas of noted livestock/recreation interface. Some improvements in setting and visual quality would occur in the short-term (2017). This alternative does not meet the RFP for areas managed under the 4.3 prescription in the East Fork of Mink Creek. A Forest Plan amendment to change “suitability” mapping for this prescription would be required.

**Cummulative Effects:** Grazing has adversely affected recreation settings and scenery within the project area in some areas and for some portion of the grazing season for some recreationists. Future trends that will also affect settings and scenery include population growth, loss of open space adjacent to forest lands, drought, diversification of recreation uses and technological changes in the way people use the forest. These trends will make Forest system lands for valuable for their resources and their recreation potential. Local economies may rely more heavily on adjacent public lands in the future as “tourism” grows and resource-based industries decline.

## Wildlife

### Alternative 1

Under Alternative 1, the potential for livestock impacts would generally cease to exist. Benefits to wildlife from the removal of grazing would be most apparent in the site specific areas where concentrated use has occurred; while in areas of light grazing wildlife may receive little or no benefit. While lightly grazed areas would be expected to recover quickly, those areas that have received constant use in specific areas may take many years to recover, especially in areas where “increasers” such as coneflower and mules ear have become established, or in shade-up sites where there is a lack of vegetation due to excessive trampling/loafing. While the potential for spread of noxious weeds from livestock would cease after 2 years, it would be of critical importance to continue intensive control efforts of noxious weeds, both to ensure noxious weed establishment does not occur in areas previously disturbed by livestock, and to ensure noxious weeds dispersal (through natural and other human related avenues) is adequately controlled.

The impacts of tribal grazing under alternative 1, which would be implemented per current Forest Plan standards and guidelines, along with a properly fenced municipal watershed boundary and the closure of Prescription area 4.3(b), would likely have no adverse impacts to wildlife. The “resting” timeframes between when the Shoshone-Bannock elect to graze the allotments would result in significant improvements to habitat within the allotments, especially within riparian areas. During those years the tribes do elect to graze the allotments, impacts to wildlife would generally be limited but similar to effects described under Alternative 2.

*Townsend's big-eared bat-* While livestock grazing is not expected to impact roosting habitat (tree cavities, bridges, snags) or bats directly, the primary benefit of Alternative 1 would be *indirect*, through the improvement of prey species habitat and foraging habitat for Townsend's big-eared bat, particularly riparian habitats. No benefits to hibernacula are expected, as none are known to occur within the analysis area. Due to the expected improvements in riparian areas and the resulting improvements in foraging habitat and prey species habitats, Alternative 1 would have a *Beneficial Impact* on Townsend's big eared bats.

*Northern goshawk-* Similar to Townsend's big-eared bat, the benefits to Northern Goshawk resulting from the implementation of Alternative 1 would be *indirect*, primarily through the

improvement of prey species habitats. As described in the “Analysis of Capable and Suitable Habitat for Management Indicator Species on the Caribou National Forest” (Colt and Green 2012 p. 38), Northern Goshawks prey on a wide variety of avian and mammalian species, and while some of their prey may receive little benefit from a lack of livestock grazing (such as squirrels), other species, such as some small mammals and migratory landbirds would benefit, and therefore Alternative 1 would have a *Beneficial Impact* on Northern Goshawk.

*Columbian sharp-tailed grouse*- As described above, brood rearing, summer, and wintering habitat for sharp-tailed grouse occurs within the analysis area. The removal of grazing would remove the potential for livestock related disturbance to any brood rearing occurring in the analysis area, and would also remove the potential for livestock related impacts to vegetation, particularly riparian vegetation. Alternative 1 would allow for quick recovery of the riparian areas from their current condition in areas that have been adversely impacted by livestock grazing. Given the lack of potential for impacts to sharp-tailed grouse during brood rearing, and the lack of grazing related impacts to vegetation (riparian and upland), Alternative 1 would have a *Beneficial Impact* on sharp-tailed grouse.

*Greater sage-grouse*- As described above, habitat for sage-grouse within the analysis area is lacking, except for a potential wintering or stopover area on a high elevation ridgeline to the east of Indian Mountain. This wintering/stop-over area has been minimally impacted, if at all, by current livestock grazing. Given that there are no leks within or adjacent to the analysis area, no known use of the analysis area except during the winter (when livestock grazing is not occurring), and current livestock use of this area is minimal or non-existent (ie not impacting or degrading the current condition), it is expected that Alternative 1 will have *No Impact* on greater sage-grouse.

*Great gray owl, Flammulated owl, and Boreal owl*- While livestock grazing is not expected to directly impact these species or nesting habitat (tree cavities, snags) for these species directly, the primary benefit of Alternative 1 would be *indirect*, through the improvement of prey species habitat and foraging habitat for these owls especially in high use areas and riparian habitats. Due to the expected improvements in riparian areas and the resulting improvements in foraging habitat and prey species habitats, Alternative 1 would have a *Beneficial Impact* on these species.

*Three-toed woodpecker*- In general, given the foraging habits (primarily on wood boring insect larvae) and nesting habits (primarily occurring in standing trees or snags), there is little potential, if any, for domestic livestock grazing to impact three toed woodpeckers. Although slight, given the potential for nesting in riparian willow areas and the expected improvements in riparian areas associated with alternative 1, *Beneficial Impacts*, to three-toed woodpeckers would be expected.

*Amphibians*- Under alternative 1, all livestock-related water developments, waterlines, and other improvements would be evaluated by an interdisciplinary team for removal and restoration needs. The removal or restoration of water developments (and the corresponding decrease in the potential for livestock related impacts (trampling, mucking) to springs, seeps, riparian and other amphibian habitat), would result in *Beneficial Impacts* to amphibians and their habitats.

*Migratory Landbirds*- There are many high priority habitats (riparian areas, non-riverine wetlands, sagebrush, aspen, and shrublands) within the analysis area, which are “Priority A” habitats as identified by the Intermountain West Joint Venture (IWJV 2005) and are the “highest priority” habitats as identified by the Idaho Bird Conservation Plan (ID PIF Bird Conservation Plan 2000). Further, the Mink Creek/Cherry Springs IBA, which has been identified as providing essential nesting, migration, and wintering habitat, occurs in the analysis area. The removal of grazing within the analysis area (and in particular the Mink/Cherry Springs IBA) would provide many benefits to migratory birds, primarily through improvements to riparian areas (both associated with streams, and those associated with springs, seeps wetlands etc), and would eliminate the potential for direct livestock impacts to migratory birds nesting on the ground or in shrubs. In addition, the fencing of the 4.3(b) Prescription area would cease grazing completely within the East Fork Mink Creek portion of the Mink Creek/Cherry Springs IBA, within which grazing has been identified as an issue.

*Mule Deer and Elk*- As previously described riparian areas are highly important for Mule Deer and Elk, and the improvements to riparian areas resulting from a lack of grazing would result in a *Beneficial Impact* to big game species within the analysis area. Other impacts of livestock grazing, such as the potential for direct disturbance to fawning/calving deer and elk from the presence of livestock, would also no longer occur. Benefits to winter range, would likely be minimal, given that current livestock grazing impacts are minimal, and there are several other factors (Cheatgrass invasion, conifer and maple encroachment, human encroachment), that are currently having greater impacts on the condition of winter range.

### **Cumulative Effects**

Alternative 1: As described in the analysis section above, the selection of Alternative 1 would be beneficial to all special status wildlife species, therefore, no or very minimal livestock impact related contributions to adverse cumulative effects would be expected from the selection of this alternative. However, even in the relative absence of livestock grazing, other factors (occurring both within and adjacent to the analysis area) will continue to stress wildlife resources, including conifer encroachment into aspen stands, replacement of mixed shrub and sagebrush communities by juniper, presence of invasive species, human encroachment, and increased recreational use.

### **Alternative 2**

*Townsend's big-eared bat*- Livestock grazing would not be expected to impact roosting habitat (tree cavities, bridges, snags) or bats directly. The primary mechanism of effect to bats is indirect; primarily through forage utilization of prey species habitat, particularly through the utilization of riparian vegetation. However, the specific utilization standards that have been included with this proposal, along with proper use of deferred grazing systems, would be expected to leave adequate shrubs, trees, flowering plants, and other vegetation in riparian and upland areas to provide habitat for Townsends big-eared bat prey species. The removal of grazing from the municipal watershed, along with the closure of grazing in prescription area 4.3(b), would be beneficial to the riparian and upland habitats in these areas, and therefore beneficial to Townsend's big-eared bat and their prey species. In general, while improvement to riparian and upland habitats are expected under this alternative, site specific impacts from livestock grazing (including impacts from shade-up areas, the increased potential for the spread

of noxious weeds) remain, which does result in site specific, (generally less than 1 acre) areas of impact across the allotment that can impact habitat for the prey species of Townsends big-eared bats. While this may impact individual or small numbers of bats, overall this impact would be minor and no impacts the population viability would occur. Therefore, while there are beneficial aspects to this alternative, overall, Alternative 2 *“May impact individuals or habitat, but will not likely contribute to a trend towards federal listing or cause a loss of viability to the population or species.”*

*Northern goshawk*- No known goshawk nests are located within the allotments, and no direct effects to goshawks are expected. The specific utilization standards that have been included with this proposal would be expected to leave adequate shrubs, trees, flowering plants, and other vegetation in riparian and upland areas to provide habitat for Northern Goshawk prey species. The deferred grazing schedule would be beneficial to migratory birds and other avian species, potentially resulting in indirect benefits to Northern Goshawk (through improvement of prey species habitats). Further, forest level analysis (Colt and Green 2012) determined that existing Forest Plan standards and guidelines were sufficient to maintain satisfactory goshawk habitat on grazing allotments.

The removal of grazing from the municipal watershed, along with the closure of grazing in prescription area 4.3(b), would be beneficial to the riparian and upland habitats in these areas, and therefore beneficial to Northern Goshawk and their prey species. In general, while improvement to riparian and upland habitats are expected under this alternative, site specific impacts from livestock grazing (including impacts from shade-up areas, the increased potential for the spread of noxious weeds) remain, which does result in site specific, (generally less than 1 acre) areas of impact across the allotment that can impact habitat for Northern Goshawk prey species. While this may impact individual or small numbers of prey species, overall this impact would be minor and these impacts would not be expected to reduce prey species populations to the point where the viability of Northern Goshawk would be impacted. Therefore, while there are beneficial aspects to this alternative, overall, Alternative 2 *“May impact individuals or habitat, but will not likely contribute to a trend towards federal listing or cause a loss of viability to the population or species.”*

*Columbian sharp-tailed grouse*- As described above, important brood rearing, summer, and wintering habitat for sharp-tailed grouse occurs within the analysis area, with both riparian and mountain shrub habitats providing extremely important habitat for sharp-tailed grouse. The specific utilization standards that have been included with this proposal, along with deferred grazing, would be expected to leave adequate shrubs, trees, flowering plants, and other vegetation in riparian and upland areas to provide habitat for sharp-tailed grouse and would further improve the hiding cover for sharp-tailed broods in the early season on those allotments that have been deferred. An important aspect of this alternative is the following stipulation *“implement forage utilization standards to limit utilization of the current annual growth of key winter shrubs for sharp-tails (serviceberry, chokecherry, hawthorn, aspen, snowberry, and willow) to no more than thirty-five percent use.”* The utilization of no more than 35% of the current annual growth of key winter shrubs is identified as an important conservation measure in the Draft Idaho Columbian sharp-tailed grouse Conservation Plan (Ulliman et al 1998) and the Strategic Management Plan for Columbian sharp-tailed grouse (Utah DWR 2002). The implementation of this stipulation along with the specific utilization standards are expected to greatly improve the existing conditions within the analysis area for sharp-tails.

Conversely the maximum allowable grazing season from May 15 until October 10, coincides partially with the lekking and nesting timeframes for sharp-tailed grouse, which occurs



approximately March-June. As previously described for sharp-tailed grouse, there are no leks within the analysis area and nesting is not expected. Therefore, no direct disturbances to sharp-tailed grouse leks or nests are expected. However, since brood rearing is expected to occur within the analysis area, livestock grazing does have the potential to disturb/displace sharp-tailed grouse during a critical timeframe (when young are being raised), this is most likely to occur in those areas of the analysis area that occur within 2 miles of active leks. In response to grazing disturbance, sharp-tailed grouse and their broods would likely move to ungrazed rangelands (Utah DWR 2002a), either on or off Forest. The impacts of this disturbance would difficult to quantify, but likely minimal as long as the specific utilization measures in this alternative are being met, which would ensure the habitat quality of un-grazed areas within the allotments remains high.

Further, management of the allotments in compliance with existing Forest Plan Standards and guidelines, was found to adequately provide for the protection and improvement of Columbian sharp-tailed grouse habitat.

The removal of grazing from the municipal watershed, along with the closure of grazing in prescription area 4.3(b), would be beneficial to the riparian habitats within these areas, and therefore beneficial to Columbian sharp-tailed grouse.

In general, while improvement to riparian and upland habitats are expected under this alternative, site specific impacts from livestock grazing (including impacts from shade-up areas, the increased potential for the spread of noxious weeds) remain, which does result in site specific, (generally less than 1 acre) areas of impact across the allotment that can impact habitat Sharp-tailed grouse. While this may impact individuals and/or small areas of habitat, overall this impact would be minor and these impacts would not be expected to reduce habitat to the point where the viability of Sharp-tailed grouse would be adversely impacted. Therefore, while there are beneficial aspects to this alternative, overall, Alternative 2 *“May impact individuals or habitat, but will not likely contribute to a trend towards federal listing or cause a loss of viability to the population or species.”*

*Greater sage-grouse*- As described above, habitat for sage-grouse within the analysis area is lacking, except for a potential wintering or stopover area on a high elevation ridgeline to the east of Indian Mountain. This wintering/stop-over area has been minimally impacted, if at all, by current livestock grazing. Given that there are no leks within or adjacent to the analysis area, no known use of the analysis area except during the winter (when livestock grazing is not occurring), and current livestock use of the potential wintering/stop-over area is minimal or non-existent (ie not impacting current conditions, it is expected that Alternative 2 (which will bring grazing into compliance with current Forest Plan standards and guidelines) will have *No Impact* on greater sage-grouse.

*Great gray owl, Flammulated owl, and Boreal owl*- While livestock grazing is not expected to directly impact these species or nesting habitat (tree cavities, snags) for these species directly, the primary benefit of Alternative 2 would be *indirect*, through the improvement of prey species habitat and foraging habitat for these owls especially in high use areas and riparian habitats. However, as described for the above, site specific impacts will likely to continue to exist, potentially impacting individuals, but having little or no impact at the population level. Therefore, while there are beneficial aspects of Alternative 2, overall, this alternative *“May impact individuals or habitat, but will not likely contribute to a trend towards federal listing or cause a loss of viability to the population or species.”*

*Three-toed woodpecker*- In general, given the foraging habits (primarily on wood boring insect larvae) and nesting habits (primarily occurring in standing trees or snags), there is little potential,

if any, for domestic livestock grazing to impact three toed woodpeckers. Given the lack of potential impacts there will be *No Impact* to Three-toed woodpeckers under Alternative 2.

*Amphibians*- The impacts to amphibians under Alternative 2 are directly tied to the conditions of the riparian areas. Given the design features regarding livestock water developments and the specific utilization criteria associated with Alternative 2, along with the implementation of Forest Plan Standards and Guidelines, improving trends in riparian habitat are expected. Further, the complete removal of grazing from the municipal watershed, along with the closure of grazing in prescription area 4.3(b), would be beneficial to the riparian habitats in these areas, and therefore beneficial to amphibians occurring in these areas. While the overall riparian habitat conditions within the analysis area would be expected to improve, site specific impacts would remain, including the potential for direct impacts (ie crushing related mortality of individuals, especially juveniles), and the site specific habitat related impacts of high livestock use around wet areas.

*Migratory Landbirds*- As previously described, a variety of highly important habitats for migratory birds exists within the analysis area. Of particular importance to migratory landbirds are the habitat conditions within riparian areas. As previously described, the implementation of specific utilization criteria under Alternative 2, along with the implementation of grazing per current Forest Plan Standards and Guidelines, are expected to result in improved riparian conditions within the analysis area. Further, the complete removal of grazing from the municipal watershed, along with the closure of grazing in prescription area 4.3(b), would be beneficial to the riparian habitats in these areas, and therefore beneficial to amphibians occurring in these areas. The closure of the 4.3(b) prescription area to grazing would remove the grazing impacts from approximately 3 miles of riparian habitats within the Mink Creek/Cherry Springs IBA, positively impacting migratory bird habitat. While the overall riparian habitat conditions within the analysis area would be expected to improve, site specific impacts would remain, including the potential for direct impacts (ie nest destruction as a result of livestock trampling, knocking nests out of shrubs, etc.), and the site specific habitat related impacts of high livestock use around wet areas and other concentrated use areas. The implementation of a deferred grazing rotation will bring management of the allotments into compliance with Forest Plan guidelines to manage herbaceous cover to conceal nests through the first incubation period for ground and low shrub-nesting birds.

*Mule Deer and Elk*- As previously described riparian areas are highly important for Mule Deer and Elk, and the improvements to riparian areas resulting from the implementation of the specific utilization criteria, would be expected to benefit Mule Deer and Elk within the analysis area. The complete removal of grazing from the municipal watershed, along with the closure of grazing in prescription area 4.3(b), would be beneficial to the riparian habitats in these areas, and therefore beneficial to Mule deer and elk occurring in these areas.

Conversely, outside of the municipal watershed and the 4.3(b) prescription areas, site specific impacts from livestock grazing would remain (including impacts from shade-up areas, the increased potential for the spread of noxious weeds, etc.). Further, while specific areas of fawning/calving within the analysis area are not specifically known, given the proposed maximum allowable grazing season of May 15-October 10 overlaps with the fawning/calving timeframe, the potential does exist for disturbance to big game during this critical timeframe. While these impacts would be expected to adversely impact individuals, impacts at the population scale (IDF&G game management unit) would be difficult to quantify.

Since no motorized road or trail construction would occur, no impacts to existing Big Game security areas would occur.

Winter range areas for big game in the analysis area would be managed per existing Forest Plan standards and guidelines, which would allow for utilization of up to 20% of the current year's growth of key browse species, and 45% of the current year's growth of key herbaceous species. As previously described, the uplands are currently only minimally impacted by current livestock grazing (it is important to note that large areas of winter range are not capable for domestic livestock grazing, further limiting use in these areas, see Winter Range Map/Livestock Capability Map in project record). Implementing utilization criteria in compliance with current Forest Plan standards and guidelines, along with considering that current livestock grazing is having little impact on the uplands (and associated winter range areas), the selection of alternative 2 would likely not result in any measurable adverse impact to winter range due to livestock grazing (while overall continued degradation of winter range is expected due to the other factors previously mentioned, including the presence of invasive species (cheat grass, thistle, etc), and maple/conifer/human encroachment).

As described, due to the expected improvements in riparian areas, habitat for mule deer and elk will improve within the analysis area, however, population level responses would be difficult to quantify at the scale of the PMU or Elk Management Zone, due to the small size of the analysis area in relation to these population management areas, and due to the multitude of factors outside of the analysis area impacting deer and elk populations.

### **Cumulative Effects**

The cumulative effect would result in improvements to riparian areas (while maintaining upland conditions) within the analysis area. This is expected to alleviate the current adverse impacts of livestock grazing that are occurring under existing management. However, although benefits to wildlife occur to varying degrees within each alternative, site specific vegetation related impacts resulting from livestock grazing are expected along with the associated direct and/or indirect impacts to wildlife. These livestock grazing related impacts, when combined with the other and cumulatively more significant habitat related stressors, including conifer encroachment into aspen stands, replacement of mixed shrub and sagebrush communities by juniper, presence of invasive species, human encroachment, and increased recreational use, will increase the overall impacts and stressors on wildlife within the analysis area. While the specific "breaking point" (that point at which the combined impacts of all activities within an area, becomes too great, and a particular species no longer occurs in an area) of the special status species within the project area cannot be exactly known, the combined impacts of all activities, grazing included, would be expected to move special status species occurring within the analysis area incrementally closer to that point. For example, adverse impacts of livestock grazing on aspen stands are expected to be limited to small scale, site specific areas within the analysis area. However, when these small scale site specific impacts to aspen are combined with the other impacts on aspen (lack of disturbance/conifer encroachment, recreation, etc), and with the larger scale losses of aspen both within the analysis area (USDA-FS 2010b) and at larger scales (estimated loss of approximately 140,000 acres on the Caribou NF (USDA-2003B p. 3-75)), cumulatively greater adverse impacts to biodiversity result.

### **Alternative 3**

Important Wildlife aspects of this alternative include:

- Grazing within the municipal watershed would be excluded by implementing livestock management techniques such as herding, salt placement, and fenced water sources. Adaptive management "triggers" would be in place such that a fence would be constructed if livestock use exceeds 10 percent of herbaceous use. In addition, monitoring data subsequent to the decision would be collected and used to inform additional decisions regarding the construction of

additional fencing.

- A “deferred grazing” system would be established whereby the first season unit would only be permitted once out of every three years.
- The proposed maximum allowable grazing season would from May 15 until October 10.
- The “not suitable” determination of Prescription area 4.3(b) would be changed to “suitable,” allowing grazing in this Prescription area under an adaptive management strategy whereby livestock would be moved to the next unit or off the Forest would be if livestock disturbance exceeds 25 percent (measured along 100-foot transect by District staff). Additional measures such as herding or salt placement would be implemented to minimize livestock impacts at designated trailheads, trails, and established dispersed recreation sites

In general, the impacts of Alternative 3 would be similar to the impacts of Alternative 2, with the exception that some low level use of the municipal watershed may occur, and the benefits of completely excluding grazing from prescription area 4.3(b) would not be realized. The adaptive management strategy of removing livestock from the high recreational use areas when the 25% livestock disturbance threshold has been met, would help to alleviate the current combined effects of livestock grazing and recreation, but would be much less beneficial than removing grazing from the 4.3(b) prescription area. Overall, while this alternative would comply with current Forest Service standards and guidelines and utilization criteria, the site specific impacts of livestock grazing would be more widespread in the analysis area.

*Townsend's big-eared bat*- The impacts of Alternative 3 would generally mirror those of Alternative 2. The adaptive management prescription of keeping utilization within the watershed at less than 10% use, or build fences to exclude livestock, would result in very minor impacts to the municipal watershed from a wildlife perspective. Even if up to 10% use occurred, this utilization standard is low enough that no impacts to Townsend's big-eared bat or their prey species would be expected in the municipal watershed. In all other areas, improvements to riparian and upland habitats are expected due to implementation of current Forest Service standards and guidelines and utilization criteria. The adaptive management prescription of moving livestock to the next unit or off Forest if the 25% threshold was exceeded, would likely help to alleviate the combined impacts of recreation and livestock grazing in site specific areas. However, the site specific impacts from livestock grazing (including impacts from shade-up areas, the increased potential for the spread of noxious weeds) would remain in other areas throughout the analysis area, which does result in site specific, (generally less than 1 acre) areas of impact across the allotment that can impact habitat for the prey species of Townsends big-eared bats. While this may impact individual or small numbers of bats, overall this impact would be minor and no impacts the population viability would occur. Therefore, Alternative 2 “*May impact individuals or habitat, but will not likely contribute to a trend towards federal listing or cause a loss of viability to the population or species.*”

*Northern goshawk*- No known goshawk nests are located within the allotments, and no direct effects to goshawks are expected. The adaptive management prescription of keeping utilization within the watershed at less than 10% use, or build fences to exclude livestock, would result in very minor impacts to the municipal watershed from a wildlife perspective. Even if up to 10% use occurred, this utilization standard is low enough that no impacts to Northern Goshawk or their prey species would be expected. In all other areas, improvements to riparian and upland habitats are expected due to implementation of current Forest Service standards and guidelines and utilization criteria. The deferred grazing schedule would be beneficial to migratory birds and other avian species, potentially resulting in indirect benefits to Northern Goshawk (through

improvement of prey species habitats). The adaptive management prescription of moving livestock to the next unit or off Forest if the 25% threshold was exceeded, would likely help to alleviate the combined impacts of recreation and livestock grazing in site specific areas. Further, forest level analysis (Colt and Green 2012) determined that existing Forest Plan standards and guidelines were sufficient to maintain satisfactory goshawk habitat on grazing allotments.

While improvement to riparian and upland habitats are expected under this alternative, site specific impacts from livestock grazing (including impacts from shade-up areas, the increased potential for the spread of noxious weeds) remain, which does result in site specific, (generally less than 1 acre) areas of impact across the allotment that can impact habitat for Northern Goshawk prey species. While this may impact individual or small numbers of prey species, overall this impact would be minor and these impacts would not be expected to reduce prey species populations to the point where the viability of Northern Goshawk would be impacted. Therefore, while there are beneficial aspects to this alternative, overall, Alternative 2 *“May impact individuals or habitat, but will not likely contribute to a trend towards federal listing or cause a loss of viability to the population or species.”*

*Columbian sharp-tailed grouse-* As described above, important brood rearing, summer, and wintering habitat for sharp-tailed grouse occurs within the analysis area, with both riparian and mountain shrub habitats providing extremely important habitat for sharp-tailed grouse. The implementation of current Forest Service standards and guidelines and utilization criteria along with deferred grazing, would be expected to leave adequate shrubs, trees, flowering plants, and other vegetation in riparian and upland areas to provide habitat for sharp-tailed grouse and would further improve the hiding cover for sharp-tailed broods in the early season on those allotments that have been deferred. Further, management of the allotments in compliance with existing Forest Plan Standards and guidelines was found to adequately provide for the protection and improvement of Columbian sharp-tailed grouse habitat.

Conversely the maximum allowable grazing season from May 15 until October 10, coincides partially with the lekking and nesting timeframes for sharp-tailed grouse, which occurs approximately March-June. As previously described for sharp-tailed grouse, there are no leks within the analysis area and nesting is not expected. Therefore, no direct disturbances to sharp-tailed grouse leks or nests are expected. However, since brood rearing is expected to occur within the analysis area, livestock grazing does have the potential to disturb/displace sharp-tailed grouse during a critical timeframe (when young are being raised), this is most likely to occur in those areas of the analysis area that occur within 2 miles of active leks. In response to grazing disturbance, sharp-tailed grouse and their broods would likely move to ungrazed rangelands (Utah DWR 2002a), either on or off Forest. The impacts of this disturbance would likely be minimal as long as the specific utilization measures in this alternative are being met, which would ensure the habitat quality of un-grazed areas within the allotments remains adequate to support sharp-tailed grouse and their broods.

In general, while improvement to riparian and upland habitats are expected under this alternative, site specific impacts from livestock grazing (including impacts from shade-up areas, the increased potential for the spread of noxious weeds) remain, which does result in site specific, (generally less than 1 acre) areas of impact across the allotment that can impact habitat Sharp-tailed grouse. While this may impact individuals and/or small areas of habitat, at the scale of the analysis area this impact would be minor and these impacts would not be expected to reduce habitat to the point where the viability of Sharp-tailed grouse would be impacted. Therefore, Alternative 3 *“May impact individuals or habitat, but will not likely contribute to a trend towards federal listing or cause a loss of viability to the population or species.”*

*Greater sage-grouse*- As described above, habitat for sage-grouse within the analysis area is lacking, except for a potential wintering or stopover area on a high elevation ridgeline to the east of Indian Mountain. This wintering/stop-over area has been minimally impacted, if at all, by current livestock grazing. Given that there are no leks within or adjacent to the analysis area, no known use of the analysis area except during the winter (when livestock grazing is not occurring), and current livestock use of the potential wintering/stop-over area is minimal or non-existent, it is expected that Alternative 3 will have *No Impact* on greater sage-grouse.

*Great gray owl, Flammulated owl, and Boreal owl*- While livestock grazing is not expected to directly impact these species or nesting habitat (tree cavities, snags) for these species directly, the primary benefit of Alternative 3 would be *indirect*, through the improvement of prey species habitat and foraging habitat for these owls especially in high use areas and riparian habitats. However, as described above, site specific impacts will likely to continue to exist, potentially impacting individuals, but having little or no impact at the population level. Therefore, Alternative 3 “*May impact individuals or habitat, but will not likely contribute to a trend towards federal listing or cause a loss of viability to the population or species.*”

*Three-toed woodpecker*- In general, given the foraging habits (primarily on wood boring insect larvae) and nesting habits (primarily occurring in standing trees or snags), there is little potential, if any, for domestic livestock grazing to impact three toed woodpeckers. Given the lack of potential impacts there will be *No Impact* to Three-toed woodpeckers under Alternative 3.

*Amphibians*- The adaptive management prescription of keeping utilization within the watershed at less than 10% use, or build fences to exclude livestock, would result in very minor impacts to the municipal watershed from a wildlife perspective. Even if up to 10% use occurred, this utilization standard is low enough that no impacts to amphibians would be expected in the municipal watershed. In all other areas, improvements to riparian and upland habitats are expected due to implementation of current Forest Service standards and guidelines and utilization criteria. The adaptive management prescription of moving livestock to the next unit or off Forest if the 25% threshold was exceeded, would likely help to alleviate the combined impacts of recreation and livestock grazing in site specific areas. While the overall riparian habitat conditions within the analysis area would be expected to improve, site specific impacts would remain, including the potential for direct impacts (ie crushing related mortality of individuals, especially juveniles), and the site specific habitat related impacts resulting from high livestock use around wet areas.

*Migratory Landbirds*- As previously described, a variety of highly important habitats for migratory birds exists within the analysis area. Of particular importance to migratory landbirds are the habitat conditions within riparian areas. As previously described, the implementation of current Forest Service standards and guidelines and utilization criteria, is expected to result in improved riparian conditions within the analysis area. While overall riparian habitat conditions within the analysis area would be expected to improve, site specific impacts would remain, including the potential for direct impacts (ie nest destruction as a result of livestock trampling, knocking nests out of shrubs, etc.), and the site specific habitat related impacts of high livestock use around wet areas and other concentrated use areas. The implementation of a deferred grazing rotation will bring management of the allotments into compliance with Forest Plan guidelines to manage herbaceous cover to conceal nests through the first incubation period for ground and low shrub-nesting birds.

*Mule Deer and Elk*- Year round habitat exists within the analysis area for Mule Deer and Elk. As previously described riparian areas are highly important for Mule Deer and Elk, and the improvements to riparian areas resulting from the implementation of current Forest Service standards and guidelines and utilization criteria, would be expected to benefit big game within

the analysis area.

While specific areas of fawning/calving within the analysis area are not specifically known, given the proposed maximum allowable grazing season of May 15-October 10 overlaps with the fawning/calving timeframe, the potential does exist for disturbance to big game during this critical timeframe. While these impacts would be expected to adversely impact individuals, impacts at the population scale (IDF&G game management unit) would be difficult to quantify.

Since no motorized road or trail construction would occur, no impacts to existing Big Game security areas would occur.

Winter Range Areas for big game in the analysis area would be managed per existing Forest Plan standards and guidelines, which would allow for utilization of up to 20% of the current year's growth of key browse species, and 45% of the current year's growth of key herbaceous species. As previously described, the uplands are currently only minimally impacted by current livestock grazing (it is important to note that large areas of winter range are not capable for domestic livestock grazing, further limiting use in these areas, see Winter Range Map/Livestock Capability Map in project record). The implementation of current Forest Service standards and guidelines and utilization criteria along with considering that current livestock grazing is having little impact on the uplands (and associated winter range areas), the selection of Alternative 3 would likely not result in any measurable adverse impact to winter range due to livestock grazing (while overall continued degradation of winter range is expected due to the other factors previously mentioned, including the presence of invasive species (cheat grass, thistle, etc), and maple/conifer/human encroachment).

As described, due to the expected improvements in riparian areas, habitat for mule deer and elk will improve within the analysis area, however, population level responses would be difficult to quantify at the scale of the PMU or Elk Management Zone, due to the small size of the analysis area in relation to these population management areas, and due to the multitude of factors outside of the analysis area impacting deer and elk populations.

### **Cumulative Effects**

Cumulative effects would be similar to Alternative 2.

### **Alternative 4**

This alternative is the same as Alternative 3 with the exception of additional restrictions in riparian to further protect Columbian sharp-tailed grouse habitat and no adaptive management would be implemented.

This alternative was developed to improve the rate of riparian recovery. It also addresses the water resources, vegetation diversity, and recreation issues.

Riparian restrictions include: Livestock grazing would be restricted in riparian areas where monitoring data documented decreasing trends. These areas would remain un-grazed by livestock until there are documented upward trends; this could take up to five years (As described in the GIG for improvement of "all factors").

In the Indian, Walker, and Bell Marsh units to avoid impacts to any sharp-tails or broods occurring in the area (due to adjacent known active sharp tail leks), Livestock grazing would be limited to 30 days, or until utilization standards are met (whichever occurs first) and to "one year in four" grazing use (per GIG Table A)

Recreation mitigations include: The following recreation conflict areas would be fenced: Forest Road #002 and #890 (Scout Mountain); the trailheads on Bannock Highway; South Fork of Mink dispersed camp areas and trailheads, Kinney Creek, Valve House, Nordic Ski Area and the Crestline Trail.

Generally, the potential impacts of this alternative are very similar to Alternative 3. However, as described no adaptive management would be implemented. Therefore, the watershed boundary would be fenced (as described in Alternative 1 and 2), this would be beneficial to wildlife in the sense that grazing would be completely excluded from municipal watershed, eliminating the potential for direct impacts to amphibians, big game, and migratory birds occurring in this area. The restriction of grazing to “one year in four” in the Indian, Walker, and Bell Marsh drainage would be expected to greatly improve riparian conditions in these drainages and would be very beneficial to wildlife occurring in these drainages, especially sharp-tailed grouse. Given that grazing would be limited to “one year in four” in the above mentioned drainages, this would also limit the potential for direct disturbance to sharp-tailed grouse and their broods occurring in the area (since livestock would be absent three out of four years).

*Migratory Birds-* As previously described, riparian areas are of critical importance for migratory birds. The MOU (USDA-FS and USFWS 2008) describes the responsibilities of the Forest Service to incorporate “bird conservation principles, measures, and practices into agency activities,” and directs the Forest Service to “avoid or minimize, to the extent practicable, adverse impacts on migratory bird resources during agency actions.” As described above, site specific habitat impacts are expected under the grazing alternatives and the potential for take exists. However, management of the allotments is brought into compliance with current Forest Plan standards and guidelines and a deferment schedule is incorporated into the allotment management plans (bringing existing management into compliance with Forest plan guidelines). The effort to improve the existing condition of riparian areas under all alternatives will be beneficial to migratory birds and their habitat within the analysis area. While water quality is the overriding issue, efforts to improve riparian habitat directly correlate with bird conservation principles and practices, and take is avoided to the extent practical through the use of riparian utilization criteria which minimizes the amount of time livestock spend in riparian areas (and forces them to move on to other areas when the utilization criteria have been met), and through the implementation of a deferment. The incorporation of migratory birds in planning efforts, the analysis of impacts of the project on migratory birds, the improvements to riparian habitat (while maintaining upland conditions) and the minimization of the potential for impacts to migratory birds meets Forest Service requirements under the MOU.

### **Cumulative Effects**

Cumulative effects would be similar to Alternative 2.

## **Heritage Resources**

### **Direct and Indirect**

Cultural resources are non-renewable resources. As such, Federal regulations have been passed which prohibit destruction of significant cultural sites and obligate Federal agencies including the Forest Service to protect and manage cultural resource properties (CRP's). The Antiquities Act of 1906, the Historic Sites Act of 1935, the National Historic Preservation Act of 1966 with its 1992 and 2002 Amendments, the Archaeological and Historic Preservation Act of 1974, the



Archaeological Resources Protection Act (ARPA) of 1979, and the Native American Graves Protection and Repatriation Act (NAGPRA) of 1990 exemplify the long and progressive history of regulations concerning the protection of significant archaeological resources.

One of the goals of land managers is to protect and preserve cultural resources within an agency's jurisdiction. In order to fulfill this responsibility, an inventory of these resources is essential. Once site locations are identified, this information can then be provided to planners so that management decisions can be made to avoid or mitigate the effects of proposed project activities. In an effort to identify significant historic and/or archaeological site locations, the Caribou-Targhee National Forest utilizes survey methods including pedestrian transects and visual assessments of the projected area of potential effects (APE) for all site specific undertakings. The percentage of assessment area to be surveyed is dependant upon identified site location probability and actual areas affected by the proposed action. Coverage of such previously unsurveyed areas will be performed in compliance with the National Historic Preservation Act Section 106 Process. One hundred percent of high cultural site probability areas will be inventoried. Cultural resources property significance, i.e., National Register of Historic Places eligibility shall be determined by Forest Service Cultural Resources Specialist in consultation with the State Historic Preservation Officer (SHPO). If significant cultural resource properties fall within the area of potential effects or impact area of site specific undertakings, mitigation measures will be recommended in order to achieve a "no adverse effect" determination. All inventory reports will be submitted to the SHPO in completion of the NHPA Section 106 process.

### **Cumulative Impacts**

Cumulative impacts are the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of whether an agency or person(s) undertakes such action (43 FR 5600 §1508.7). The potential impacts to cultural resources may include mining, recreation, and road construction projects. The effect of all impacts will require complete cultural resources review prior to additional undertakings which have the potential to affect cultural resources either independently or cumulatively.

## **Tribal Treaty Rights and Trust Responsibilities**

### **Effects Common to All Alternatives**

#### **Direct and Indirect Effects**

All alternatives will maintain tribal treaty rights and the resources upon which those rights rely. None of the alternatives would change access to Federal lands. Fishing, hunting, and plant gathering would be available under all alternatives; however, Alternative 1 and 2 would leave more forage for wildlife, thereby potentially enhancing tribal members' hunting rights. Also, it would be the most beneficial to fisheries and aquatic species.

#### **Cumulative Effects**

The cumulative effects analysis area for tribal treaty rights is Southern and Central Idaho. This area is chosen because it encompasses the majority of the area currently used by tribal members. In this area, the ability of Indians to practice their traditional culture has been reduced through loss of "unoccupied lands" and degradation of the resources over time. Dams along the Snake River affected salmon runs and limited the availability of salmon for consumption. Development of open space, access restrictions, and land disposals reduced unoccupied lands for practicing tribal treaty rights. Fire suppression, grazing, mining, and timber harvest changed the

vegetation and affected water quality. The Idaho National Engineering and Environmental Laboratory (INEEL) restricted access to vast acreages of Federal lands.

In recent years, however, these trends are slowly being reversed and Federal land managers have become more informed regarding treaty rights and trust responsibilities. Elk, moose, and white-tailed deer numbers have increased. Federal and State agencies are enhancing native fish and wildlife habitat. In the shift towards ecosystem management, Federal land managers have reintroduced more natural processes such as fire across the landscape. These efforts to improve the condition of natural resources collectively serve to protect and begin restoration of tribal treaty rights.

The project area is a small part of the cumulative effects area. The action alternatives, however, would enhance trust assets and thereby, treaty rights. Alternative 1 (No action/ No Graze) would slightly enhance tribal members' ability to practice treaty rights. However, none of the alternatives would add to negative cumulative impacts.

## Short-term Uses and Long-term Productivity

NEPA requires consideration of "the relationship between short-term uses of man's environment and the maintenance and enhancement of long-term productivity" (40 CFR 1502.16). As declared by the Congress, this includes using all practicable means and measures, including financial and technical assistance, in a manner calculated to foster and promote the general welfare, to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans (NEPA Section 101).

Long-term and short-term resources are expected to improve towards meeting Desired Future Condition as described in Chapter 1. Overall, riparian and upland conditions are expected to improve (more detail is located in the Hydrologist Report 2014, and Specialist Reports 2014)

## Unavoidable Adverse Effects

None were identified.

## Irreversible and Irretrievable Commitments of Resources

**Irreversible and Irretrievable Commitments:** Irreversible/irretrievable commitments are decisions affecting non-renewable resources such as cultural resources. Such commitments are considered irreversible when the resources cannot be regained. For example, the resource has deteriorated to the point that renewal can occur only over a long period of time or at a great expense, or because the resource has been destroyed or removed.

Irretrievable commitments are those that are lost for a period of time such as the temporary loss of forage. With all alternatives, the vegetation consumed by the domestic livestock is an irretrievable loss of plant material. With moderate to light domestic livestock grazing, this is short-term (Miller, 1994, Pieper 1994, Briske et. al. 1995). No other Irreversible and Irretrievable commitment of the resources was identified.

## Other Required Disclosures

NEPA at 40 CFR 1502.25(a) directs “to the fullest extent possible, agencies shall prepare draft environmental impact statements concurrently with and integrated with ...other environmental review laws and executive orders.”

### **National Forest Management Act**

Alternative 1 and 2 fully comply with the Revised Caribou Forest Plan (2003).

Alternative 3 and 4 would require a modification to the RFP 4.3(b) prescription. All alternatives incorporates all applicable Forest Plan forest-wide standards and guidelines and management area prescriptions as they apply to the project area, and comply with Forest Plan goals and objectives. All required interagency reviews and coordination has been accomplished; new or revised measures resulting from these reviews have been incorporated.

### **Endangered Species Act**

Currently the USFWS uses the Information, Planning and Conservation (IPaC) system to inform land managers of the potential presence of ESA listed species in a project area. IPaC species lists for the analysis area requested through this system (IPaC consultation tracking # 01EIFW00-2014-SLI-0253 dated March 14, 2014 and IPaC consultation tracking # Consultation Tracking Number: 01EIFW00-2014-SLI-0547 dated June 04, 2014) indicated the Banbury Springs limpet (*Lanx spp.*), the Bliss Rapids snail (*Taylorconcha serpenticola*), and the Snake River Physa snail (*Physa natricina*) were the only ESA listed species present within the analysis area. Further, there is no designated or proposed critical habitat for any species within the analysis area. Since these species do not occur within the project area, and were likely included in the list by default since they are listed “wherever found,” a “No Effect” determination was made for the Banbury Springs Limpet, Bliss Rapids snail, and the Snake River Physa snail. The USFWS agreed with the No Effect determinations during the April 8<sup>th</sup>, 2014 streamlining meeting (reference the meeting notes in the project record). Additional species not included in the IPaC species list were discussed at the April 8<sup>th</sup>, 2014 streamlining meeting.

### **National Historic Preservation Act**

Cultural resource surveys of varying intensities have been conducted, following inventory protocols approved by the State Historic Preservation Officer. Native American Tribes or Nations have been contacted and public comment encouraged (Archeologist Report 2014).

### **Clean Water Act**

The design of project activities is in accordance with Forest Plan Standards and Guidelines, the Regional Guide, Best Management Practices, and applicable Forest Service Manual and Handbook direction. Monitoring and evaluation of the implementation and effectiveness of Forest Plan Standards and Guidelines and Best Management Practices will occur. Project activities are expected to meet all applicable State of Idaho water quality standards. Permits would be needed before the proposed water developments were implemented.

### **Clean Water Executive Order 11988**

See Water Resource Analysis, Chapter 4.

### **Executive Order on Floodplain Management (No. 11988, signed May 24, 1978)**

Implementation of any alternative will result in no additional impacts to floodplains subject to a one percent or greater base flood.

**Executive Order on Protection of Wetlands (No. 11990, signed May 24, 1978)**

Implementation of any alternative will result in no net loss of wetlands.

**Executive Order on Invasive Species (No. 13112, signed Feb. 3, 1999)**

Implementation of any alternative with mitigation “is not anticipated to cause or promote the introduction or spread of invasive species...” See Factors common to all alternatives and Chapter 4 Analysis.

**Migratory Bird Treaty Act/ Executive Order 13186**

Management objectives from The Idaho Bird Conservation Plan (Version 1.0, January 2000, prepared by Idaho Partners in Flight) would be met on all alternatives. The Migratory Bird Treaty Act (MBTA) protects all migratory birds and their parts (including eggs, nests, and feathers) from take. Take is defined in the MBTA to include by any means or in any manner, any attempt at hunting, pursuing, wounding, killing, possessing, or transporting and migratory bird, nest, egg or part thereof. A migratory bird is any species or family of birds that live, reproduce, or migrate within or across international borders at some point during their annual life cycle. Under MBTA, taking, killing or possessing migratory birds is unlawful. On January 10<sup>th</sup>, 2001, President William Clinton signed Executive Order (EO) 13186, Responsibilities of Federal Agencies to Protect Migratory Birds, directing executive departments and agencies to take certain actions to further implement the MBTA.

The Forest Service and USFWS have entered into a memorandum of understanding (MOU) to promote the conservation of migratory birds as a direct response to EO 13186 (Reference FS and USFWS 2008). One of most pertinent the steps outlined for the Forest Service is applicable to this analysis “Within the NEPA process, evaluate the effects of agency actions on migratory birds, focusing first on species of management concern along with their priority habitats and key risk factors” The Forest Service additionally agreed, to the extent practicable, to evaluate and balance benefits against adverse effects, pursue opportunities to restore or enhance migratory bird habitat, and consider approaches for minimizing take that is incidental to otherwise lawful activities. Reference the Analysis, Chapter 4, or the Wildlife Specialist report for additional information.

**Executive Order 12898 (Environmental Justice)**

Federal actions to address Environmental Justice in minority and low-income populations, and Departmental Regulations 5600-2 direct Federal agencies to integrate Environmental Justice considerations into Federal programs and activities. Environmental Justice means that, to the greatest extent practicable and permitted by law, all populations are provided the opportunity to comment before decisions are rendered, are allowed to share in the benefits of, are not excluded from, and are not affected in a disproportionately high and adverse manner by government programs and activities affecting human health or the environment. Public involvement activities in Chapter 1 documents the efforts made to provide the opportunity to comment. Implementation of any project alternative is not anticipated to cause disproportionate adverse human health or environmental effects to minority or low-income populations.

**Incomplete or Unavailable Information**

Data used was very limited to determine trend overall for vegetation and many of the Ecological Site Descriptions (ESDs) for this area are still in draft form as included in mapping completed by Soil Scientists (Green 2014). As ESDs becomes more available (finalized), they likely will be used more extensively when site-specific monitoring and evaluation occurs in the future.

For existing vegetation the new mid-scale existing vegetation map was used to provide the overall extend of vegetation types and canopy covers at the landscape scale. This layer is to be used at the 1:100,000 scale and should be considered as incomplete as a project-level map.

The mapping of vegetation on the Forest has been done/is done in various different ways making meaningful comparisons by acres problematic over time and space due to differences in classifications and data rules for deciding where to draw the lines for a polygon. For this analysis, we are primarily using the most recent mid-scale existing vegetation map data for vegetation types and canopy cover and comparing it to the desired canopy covers at the landscape scale.



## Preparers and Contributors

The Forest Service consulted the following individuals, Federal, State, and local agencies, tribes and other organization and individuals during the development of this environmental impact statement:

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## **Distribution of the Environmental Impact Statement**

This environmental impact statement has been distributed to individuals who specifically requested a copy of the document.



## **Appendices**

Draft Allotment Management Plan

## Pocatello/Midnight/Michaud ALLOTMENT MANAGEMENT PLAN

Westside Ranger District  
Caribou-Targhee National Forest  
(Bannock and Power Counties, Idaho)

### INTRODUCTION

This Allotment Management Plan implements Jeffery Hammes' decision as documented in the Pocatello /Midnight/Michaud AMP revision Record of Decision for the Pocatello Allotment analyzed within the Environmental Impact Statement. This Allotment Management Plan (AMP) supersedes the AMP approved on 1992 and 1984 by Gerald Tower.

As per FSM 2209.13.94.1, "Each AMP shall become part of Part 3 of the grazing permit . . ."

Part 1, Section 3 states, " . . .this permit may be suspended or cancelled, in whole or in part, . . .for failure to comply with any terms and conditions specified in Parts 1, 2, and 3 hereof, . . ."

Part 1, Section 8a of the Term Grazing Permit states, "The allotment management plan for the land described on page 1, Part 1 is a part of the permit, and the permittee will carry out its provisions, other instructions, or both as issued by the Forest Officer in charge for the area under permit and will require employees, agents, and contractors and subcontractors do likewise."

### GENERAL INFORMATION

#### Location

The Pocatello/Midnight/Michaud Allotments are within the Lower Portneuf, Lower Bannock Creek, and Garden-Marsh Creek Watersheds. It is 10 miles south of Pocatello, Idaho and encompasses 43,200 acres of the National Forest Systems Lands administered by the Westside Ranger District, Caribou-Targhee National Forest. Elevations range from 4,900 feet at the Forest Boundary to 8,700 feet at the summit of Scout Mountain. Precipitation ranges from 19 to 40 inches. The locations are as followed:

- Pocatello, in portions of T8S, R34E; T8S, R35E; T8S, R36E; T9S, R34E; T9S, R35E; T9S, R36E.
- Midnight in portions of Sections 19, 20, 29-34, T7S, R34E and Sections 3, 4, 5, 9, 10, 15, 22, T8S, R34E.
- Michaud in portions of Sections 6, 7, 8, 17, 18, 19, 20, T7S, R34E.

#### Coordination with Other Resource Management Needs/Activities

Past activities that will influence how this allotment will be managed in the near future (next 3-5 years) include high recreation concentration within the following locations: the northern-most dispersed camp site at the Pine Plantation (S. Fork Mink Creek Forest Plan Prescription 4.3b); southern half of Elk Meadows (Forest Plan Prescription 2.1.3b), and dispersed camp sites along the lower loop roads (Forest Road #2 and #890) below Scout Mountain campground and

within the base area of the East Fork of Mink Nordic Center (Forest Plan Prescription 4.1b, Developed Recreation Sites). Other livestock management concerns include riparian management and sharp-tail wildlife habitat. It is estimated that permit reduction will occurred with the implementation of the decision.

### **APPROVED OCCUPANCY**

Alternative 1: Tribal livestock grazing only within suitable rangelands - 4167 Head Months

Alternative 2 Maximum allowable grazing season – May 15-through October 10<sup>th</sup> - 4167 Head Months

Alternative 3 Maximum allowable grazing season – May 15-through October 10th - 5508Head Months

Alternative 4 Maximum allowable grazing season – May 15-through October 10th – 5508 Head Months

### **DESIRED CONDITIONS AND MANAGEMENT OBJECTIVES**

The 2003 RFP for the Caribou National Forest has established desired future conditions (DFCs) for various resources on the Forest. DFCs serve to indicate the direction in which management should proceed and are often expressed as goals. Additional DFCs were included from Specialist's Reports to assist in the interpretation of the RFP's DFC. Following are applicable DFC's for resources identified within the issues for this analysis.

#### **Vegetation**

- Forested habitats display a diversity of structure and composition. Productive and diverse populations of plants are maintained (RFP 3-17).
- In conifer, a range of structural stages exists where 30 to 40 percent of the acres are in mature and old age classes. Early successional are maintained through endemic insect and disease disturbance, vegetation management, and fire. Patterns are within historical ranges of variability with functional corridors present (RFP 3-17).
- Conifer types are maintained and disturbance processes are restored through vegetation management, endemic insect and disease disturbances, and fire (RFP 3-17).
- Quaking aspen communities are moving towards historical ranges with fire and other practices influencing structural class distribution and patterns across the landscape. Aspen forests are managed to achieve desired vegetative conditions with 20 to 30 percent in mature and old age classes, and to reduce the decline of aspen acres due to succession of aspen to conifer (RFP 3-17).
- Non-forested ecosystems: are resilient, diverse, and functioning within their site potential; display a diversity of structure and composition; and are within their historical range of variability (HRV) (RFP 3-17).
- Non-forested ecosystems reflect a mosaic of multiple-aged shrubs, forbs, and native grasses with management emphasis on maintaining a diverse sustainable plant community. Fire regimes exist on an approximately twenty to forty year return cycle. Patterns are within historical ranges with 30 to 50 percent of the shrubs in greater than fifteen percent canopy cover class (RFP 3-17).
- On areas capable of tall forb dominance, tall forb types reflect historic ranges of ground

cover leading into the winter season. Composition reflects a mosaic dominance of tall forb indicator species. Disturbance regimes demonstrate stable or upward trend in tall forb indicator species. Patterns are within the historical range. Historical tall forb sites, which currently are not capable of tall forb dominance, are managed to maintain watershed stability (RFP 3-17).

- Woodland types including mountain mahogany, juniper, and maple have multiple-aged shrub layers and a balanced shrub/herbaceous understory. Patterns are within historical ranges. (RFP 3-17).
- The introduction and spread of noxious weeds is contained, and ecologically sound methods of controls are applied across the Forest. New infestations of noxious weeds are rare across the landscape and existing large infestations are slowly declining (RFP 3-20).
- Forest-wide vegetation communities have the necessary structure and composition, ecological processes and function to maintain native plant species (RFP 3-21).
- Management activities contribute to the recovery and/or conservation of federally listed and proposed plant species and provide for conditions which help preclude sensitive species from being proposed for federal listing (RFP3-21).
- Native plants are generally used for revegetation projects (RFP 3-21).
- Non-native invasive and/or noxious weed species are not present, fire regimes are within historic natural variability and result in a desired mix of shrub cover classes present at the landscape scale, and desired plant species are present and well-represented.
- The desired future condition for all nonforest vegetation types is consistent – maintain and improve the presence and cover of perennial grasses, forbs and shrubs characteristic and within the potential of the site conditions within the project area.

#### **Riparian and Aquatic Habitat**

- Riparian areas filter sediments, protect stream banks, improve water quality, reduce flooding, recharge groundwater and maintain stream flow. These areas are covered by deep-rooted and other desirable, protective vegetation which provides adequate summer and winter thermal regulation. Generally, riparian areas are connected with aquatic and upland components. They provide food, water, cover, nesting areas, and protected pathways for aquatic and wildlife species (RFP 4-47).
- Stream channels and floodplains are functioning properly relative to the landform (gradient, size, shape, roughness, confinement, sinuosity, and climate). Aquatic ecosystems are within the capability of the channel types and landform (RFP 4-47).
- Riparian areas identified as being in proper functioning condition are managed to

maintain at least that condition with no downward trends. Areas identified as functioning-at-risk or nonfunctioning show an upward trend toward proper functioning condition (RFP 4-47).

- Properly functioning riparian systems contain a mosaic of well-connected habitats that support diverse populations of native and desired non-native species. All life phases are fully supported (RFP 4-47).
- Native aquatic and riparian-dependent species population strongholds are increasing and well distributed within historic ranges. Improved aquatic and riparian habitat conditions contribute to the recovery of federally listed aquatic and riparian-dependent species, and keep species-at-risk from becoming listed, allowing them to expand into previously occupied habitat. Fragmentation is reduced as connectivity between streams and rivers improves (RFP 4-47).
- Riparian areas have a range of vegetative structural stages that are at, or moving toward, a proper functioning condition, have features necessary to promote stable stream channels, provide diverse habitat conditions for both aquatic and terrestrial wildlife species and deliver clean water in support of the Clean Water Act and Safe Drinking Water Act (RFP 3-15).
- Watersheds provide infiltration, retention, and release of water appropriate to soil type, vegetation, climate, and landform (RFP 3-15).
- Watersheds provide a well-distributed pattern of nutrients and energy as well as diverse age-classes of vegetation that contribute to watershed health (RFP 3-15).
- Restoration strategies promote recovery of watershed, riparian, water quality and aquatic conditions characteristic of the geo-climatic setting (RFP 3-15).
- Public waters are restored where water quality does not support beneficial uses and otherwise are maintained or improved (RFP 4-47).
- Properly functioning riparian systems contain a mosaic of well-connected habitats that support diverse populations of native and desired non-native species. All life phases are fully supported (RFP 4-47).
- Native aquatic and riparian-dependent species population strongholds are increasing and well distributed within historic ranges. Improved aquatic and riparian habitat conditions contribute to the recovery of federally listed aquatic and riparian-dependent species, and keep species-at-risk from becoming listed, allowing them to expand into previously occupied habitat. Fragmentation is reduced as connectivity between streams and rivers improves (RFP 4-47).

### **Soil**

- Soil quality, productivity, and hydrologic function are maintained and restored where needed. Long-term soil productivity is sustained and meets future land needs (RFP 3-5).
- Soils have adequate protective cover, levels of soil organic matter (litter), and coarse woody material. Physical, chemical, and biological processes in most soils function to sustain the site (RFP 3-5).
- Microbiotic crusts and their importance to soil stability are recognized. Management practices are designed to retain and improve these soil components (RFP 3-5).

### **Recreation**

- People visiting the National Forest enjoy a broad range of recreational opportunities amid natural settings. Recreational experiences and settings meet public expectations of quality and variety, while complimenting other resources (RFP 3-39).

### **Wildlife**

- The Forest provides habitat that contributes to state wildlife management plans (RFP 3-24).
- Forest management contributes to the recovery of federally listed, endangered, and proposed species and provides for conditions that help preclude sensitive species from being proposed for federal listing (RFP 3-24).

### **Heritage Resources**

- Historic and archaeological resources are properly managed to provide for preservation of these nonrenewable resources for current and future generations. Significant sites are inventoried, protected, and if warranted, nominated to the National Register of Historic Places. Visitors to the Caribou National Forest find opportunities to learn about and enjoy their cultural heritage. Visitors have the opportunity to reflect on the relevance of the past and the land to their daily lives (RFP 3-41).

### **Management Objectives**

Maintain and improve the presence and cover of perennial grasses, forbs and shrubs characteristic and within the potential of the site conditions within the project area (Non-Forested report)

The soil management objectives for the proposed action are to maintain or improve ground cover on the uplands, and reduce the presence of active erosional features on the landscape over the next decade. (Soil Specialist Report)

Minimize the establishment and spread of noxious weeds and other invasive plant species through the application of Forest direction, Integrated Pest Management (IPM), and Best Management Practices (BMP's) (RFP 3-20).

Provide opportunities for livestock grazing within the capability and suitability of the land and in coordination with other resource goals (RFP 3-42).



Maintain good and excellent condition range and improve fair condition range to the good condition classification. Presently the fair condition range is moving towards good condition. (Range Specialist report)

#### Allotment Specific Management Objectives

- Michaud Allotment:
  - North/Left Fork Michaud Creek (Michaud Unit):
    - Maintain bank stability above 80% with no downward trends (stability = 82% in 2010).
    - Improve covered bank to greater than 90% by 2019 (covered bank = 83% in 2010).
    - Improve ecological status from mid to late by 2019 (status = mid in 2010).
- Midnight Allotment:
  - Crystal Creek (Elk Meadows/Clifton Unit):
    - Reverse downward trend in stream bank stability. Improve bank stability to over 80% by 2019 (81% in 2009 & 66% in 2011). Once 80% bank stability is achieved, maintain at least that state with no downward trends.
    - Maintain covered bank at 100% with no downward trend (100% in 2009 & 2011)
    - Improve ecological status from very early seral to early seral by 2019 and to mid by 2024 (early in 2009 & very early in 2011).
  - Additional streams in the Midnight Allotment to evaluate for a riparian DMA:
    - Midnight Unit: Establish a DMA on Midnight Creek and establish objectives for bank stability, covered bank, and ecological status.
    - Birch Creek Unit: Evaluate lower Birch Creek for the appropriateness of establishing a DMA. If appropriate, establish objectives for bank stability, covered bank, and ecological status.
- Pocatello Allotment:
  - South Fork Mink Creek (Unit 6 enclosure):
    - Maintain bank stability above 90% with no downward trend (96% in 2006 & 95% in 2011).
    - Maintain covered banks above 90% with no downward trend (99% in 2006 & 96% in 2011)
    - Maintain ecological status at late, or PNV, with no downward trend (late in 2006 & 2010).
    - Maintain site wetland rating at good or above with no downward trend (good in 2006 & 2010).
  - South Fork Mink Creek (Catch Unit):
    - Improve bank stability from 40% (2013) to 60% by 2019 and to over 80% by 2024 (~35%-43% between 2006 & 2011). Once achieved, maintain at least that state with no downward trends.

- Reverse downward trend in ecological status. Improve ecological status from early to mid by 2019 and to late by 2024 (mid in 2006 & 2011 and early in 2013). Once achieved, maintain at least that state with no downward trends.
- Reverse downward trend in site wetland rating. Improve from fair to good by 2019 (good in 2006 & Fair in 2010 & 2013). Once achieved, maintain at least that state with no downward trends.
- Maintain percent substrate fines at less than 25% with no downward trend (27% in 2013).
- South Fork Mink Creek (Unit 6):
  - Improve bank stability from 71% (2013) to 80% by 2017. Once 80% bank stability is achieved, maintain at least that state with no downward trends.
  - Improve ecological status from mid to late by 2019 (mid in 2013). Once achieved, maintain at least that state with no downward trends.
  - Maintain site wetland rating at good or above with no downward trends (Good in 2013).
- Kinney Creek (Lead Draw/Kinney Unit):
  - Continue recent improvements in bank stability (51% in 2008 & 77% in 2013). Improve bank stability from 77% to over 80% by 2017. Once 80% bank stability is achieved, maintain at least that state with no downward trends.
  - Reverse downward trend in ecological status (late in 2008 & mid in 2013). Improve ecological status from mid to late by 2019 and maintain late with no downward trend.
- East Fork Mink Creek (Lower Cow Camp Unit):
  - Maintain bank stability at over 80% with no downward trends (79% in 2013).
  - Maintain covered bank at over 90% with no downward trends (89% in 2013).
  - Improve ecological status from early to mid by 2019 and to late by 2024 (early in 2013).
  - Maintain site wetland rating at good or above with no downward trends (Good in 2013).
  - Improve percent substrate fines to less than 25% by 2020 (43% in 2013).
- Indian Creek (Indian Creek Unit):
  - Reverse downward trend in stream bank stability. Improve bank stability from 60% to over 80% by 2019 (81% in 2006 & 60% in 2013). Once 80% bank stability is achieved, maintain at least that state with no downward trends.

- Maintain covered bank at over 90% with no downward trends (88% in 2006 & 90% in 2013).
- Improve ecological status from early to mid by 2019 and to late by 2024 (early in 2006 & 2013). Once achieved, maintain at least that state with no downward trends.
- Walker Creek (Walker Creek Unit):
  - Maintain recent improvements in bank stability (54% in 2008 & 80% in 2013); maintain bank stability at over 80% with no downward trends.
  - Maintain recent improvements in bank covered (53% in 2008 & 91% in 2013); maintain bank covered at over 90% with no downward trends.
  - Continue recent improvements in ecological status (early in 2008 & mid in 2013); improve ecological status from mid to late by 2019.
  - Improve percent substrate fines to less than 25% by 2020 (43% in 2013).
  - Improve percent substrate fines to less than 25% by 2020 (38% in 2008 & 39% in 2013).
- Additional streams in the Pocatello Allotment to evaluate for a riparian DMA:
  - Bell Marsh Unit: Evaluate Bell Marsh and Goodenough Creeks for the appropriateness of establishing a one DMA in this unit. Both streams are currently rated as PFC. If appropriate; establish objectives for bank stability, covered bank, and ecological status.
  - Scout Mountain Unit: Evaluate Box Canyon, Bull Canyon, and upper East Mink Creeks for the appropriateness of establishing a one DMA in this unit. Box Canyon is rated as functioning at risk and East Mink is rated as non-functioning so one of those may be the priority. If appropriate, establish objectives for bank stability, covered bank, and ecological status.
  - Upper Cow Camp Unit: Evaluate East Mink and Valve House Draw Creeks for the appropriateness of establishing a one DMA in this unit. If appropriate, establish objectives for bank stability, covered bank, and ecological status.
  - Highway Unit: Evaluate Mink, South Mink, Corral Creeks for the appropriateness of establishing a one DMA in this unit. Corral and Mink Creek are rated as functional at risk you one of those may be the priority. If appropriate, establish objectives for bank stability, covered bank, and ecological status.

*Describe your DCs and MOs for the allotment – verbatim from the decision. Need to be consistent. Remember, objectives need to be measureable and time specific (what and by when). This will tie to your adaptive management (if you have it).*

## MANAGEMENT STRATEGY

A “deferred grazing” system would be established on all of the allotments whereby the first season unit would only be permitted once out of every three years. Specific proposals for each allotment include:

The Michaud Allotment does not have unit division fencing. Distribution, salt placement, and herding will be the most important management tool at this time for a deferred rotation system

The Midnight Allotment would alternate the Crystal and Midnight units. This will allow plants to be grazed at different phenology development. The BLM has an earlier on and off date so opportunities may occur during preseason and postseason.

The Pocatello Projected grazing schedule for the next 5 years includes: 1. -The East herd has the ability to use the Bell Marsh unit first. Also, on above average precipitation years when Dry Canyon has water this area can be used early. This will be based upon precipitation variation; 2. -The Middle herd is limited upon elevation restriction for range readiness. Kinney Creek is to incorporate into a herd through unit. Every 3<sup>rd</sup> year the cattle will be push through unit with utilization less than 20%. Cattle need to travel through area due to adjacent BLM permits; and 3. -The West herd may have more flexibility to rotate different units first. Alternating units first will allow plants to be grazed at different phenology development.

## **MONITORING**

This section describes the monitoring, observing and recording, which would be required to evaluate whether satisfactory progress is being made towards identified management objectives. Monitoring would be completed by using one of the accepted monitoring protocols outlined in *Forest Service Rangeland Ecosystem Analysis and Monitoring Handbook FSH 2209.21, Chapter 20 – Rangeland Inventory and Analysis and Chapter 40 – Rangeland Trend Monitoring*. Monitoring results will be used to determine when permit administrative is needed.

### **A. Implementation Monitoring-Short Term or Annual Monitoring**

The following site-specific forage utilization would be used to determine proper use:

There are four measurable parameters that would be used to monitor livestock grazing impacts in riparian areas. The parameters are bank disturbance, stubble height, woody species utilization and key species utilization. Allowable disturbance levels are tailored to each stream. Parameters would be measured within the DMA. One of the protocols for measuring three of these parameters is found in *Technical Bulletin No. 2005-2 Monitoring Streambanks and Riparian Vegetation-Multiple Indicators*, (Cowley and Burton). Other monitoring protocol that may be used are listed in *Forest Service Rangeland Ecosystem Analysis and Monitoring Handbook FSH 2209.21- Chapter 40, Photographic Guide for Key Riparian Graminoids (INT-GTR-308 utilization cages,)*, and ocular estimates using *Region 4 Key Forage Plant Method (FSH 2209.21)*.

**Table A-1.** GIG Riparian Forage Utilization Standards.

<b>Riparian DMA</b>	<b>Indicator</b>	<b>Standard</b>
Trail Creek & Michaud Creek	Riparian Zone Forage Utilization	50%, 6/1-7/15
		45%, 7/16-8/15
		35%, 8/16-9/30
	Bank Alteration	15%
Crystal Creek	Bank Alteration	15%
	AIZ Stubble Height (area between the stream and upland vegetation)	3 inches, 6/1-7/15
		4 inches, 7/16-8/15
		5 inches, 8/16-9/30
Midnight Creek	Wood Species Utilization	50% 6/1-8/15 40% 8/16-9/30
	AIZ Utilization	55% 6/1-7/15
		45% 7/16-8/15 35% 8/16-9/30
Pasture Unit	Indicator	Standard
Highway	Bank Alteration	15%
	AIZ Utilization	55%
Catch	Greenline Stubble Height	5 inches
Six	AIZ Utilization	35-45%
Kinney Creek	AIZ Utilization	45%
Lower Cow Camp	Green Line Stubble Height	6-8 inches
	AIZ Stubble Height	4-5 inches
Upper Cow Camp	AIZ Utilization	45%
Scout Mountain	AIZ Stubble Height	6 inches
Indian Creek	Bank Alteration	10%
	AIZ Utilization	45%
Walker Creek	Bank Alteration	10%
	AIZ Utilization	35%
Belle Marsh	Bank Alteration	15%
	AIZ Utilization	35%
Highway	Bank Alteration	15%
	AIZ Utilization	55%
Catch	Greenline Stubble Height	5 inches
Six	AIZ Utilization	35-45%

<b>Riparian DMA</b>	<b>Indicator</b>	<b>Standard</b>
Kinney Creek	AIZ Utilization	45%
Lower Cow Camp	Green Line Stubble Height	6-8 inches
	AIZ Stubble Height	4-5 inches
Upper Cow Camp	AIZ Utilization	45%
Scout Mountain	AIZ Stubble Height	6 inches
Indian Creek	Bank Alteration	10%
	AIZ Utilization	45%
Walker Creek	Bank Alteration	10%
	AIZ Utilization	35%
Belle Marsh	Bank Alteration	15%
	AIZ Utilization	35%

### 3. Upland Utilization Monitoring:

Utilization and stubble height measurements should be taken in key areas and other areas identified as sensitive or problem areas to determine if upland utilization standards and guidelines are being followed. Annual monitoring will be conducted according to the annual utilization monitoring protocols outlined in the Interagency Technical Reference "Utilization Studies and Residual Measurements" 1734-.

**Table A-2.** Upland Forage Utilization Levels

<b>Vegetation Component</b>	<b>Upland Forage Utilization (RFP 3-43)</b>	<b>Upland Forage Utilization Levels in Elk and Deer Winter Range (RFP 4-44)</b>	<b>Upland Forage Utilization Levels in Elk and Deer Winter Range Critical (RFP 4-43)</b>
Grasses and Herbaceous Species (% dry weight)	35-55%	45%	35%
Shrubs (% annual leader growth)	25-35%	20%	10%

### **B. Effectiveness Monitoring - Long Term Trend Studies for Upland and Riparian**

Establish and maintain benchmark upland vegetation studies dominant ecological types influenced by livestock grazing (RFP 5-17). Measurement frequency is every 10 years. Riparian systems would to be monitored every 3-5 years to document change of proposed

livestock management. Additional studies may be added as needed and to monitor areas of concern.

**Table A-3. Upland Monitoring Studies:**

Study Type	Location	Last Read (other dates)	Schedule read
Daubenmire	Trail Creek	8/12/2009 (on top of Parker established 8/3/1965)	2014
EUI	Bannock Range	Field Season 2008	2018
Nested Frequency	Clifton Creek	2010 (96)	2020
Photo Point	Elk Meadows	1994	2024
Photo Point	West Mink Creek	1993	2024
Range Analysis	West Mink Creek	1978	2024
Parker 3 Step	Elk Meadows	1960	2024
EUI	Bannock Range	Field Season 2008	2018
Daubenmire	South Mink Creek	7/30/2009 (96)	2024
Parker 3 step	Bull Canyon	6/24/1977 (69, 63, 57)	2024
Daubenmire	East Mink Creek	9/3/2009 (78, 69, 59, 54)	2024
Photo point/apparent trend	Indian Creek	7/23/2012 (57)	2022
Photo point/apparent trend	Walker Creek	7/23/2012 (57)	2022
Photo point/apparent trend	Bell Marsh	7/23/2012 (57)	2022
EUI	Bannock Range	Field Season 2008	2018

**Table A-4. Riparian Monitoring Studies:**

Allotment	Location/Installed	DMA Study Type	Vegetation Type	Ecological Status-Seral	Vegetation Trend
Michaud	Left Fork Michaud Creek/2010	Representative	maple/redtop/ bluegrass	Mid	Static
	Mature maple site will limit the improvement of the ecological status.				
Midnight	Crystal Creek/2009	Critical	aspen/redtop/bluegrass	Early	Static
	This site does not have perennial flow. Vegetation and trend is compatible to the local conditions.				
Pocatello	Indian Creek/2006	Critical	Douglas fir /redtop/bluegrass	Early	Static
	Located at an old photo site. This site does not have perennial flow on below 90% precipitation years. DMA is located just below a spring which stops flow half way through DMA. This DMA is limited to improve by the stream channel being influence by the mature Douglas fir.				
	Walker Creek/2008	Representative	chokecherry/bluegrass	Mid	Improving
	Located within a bottleneck of a steep topography and private land. This site does not have perennial flow and DMA is dry on below 90% precipitation years.				
	Kinney Creek/2008	Representative	Birch/bluegrass	Mid	Static
	This site does not have perennial flow and is located within big game winter range. The grazing system is currently appropriate for this location.				

Allotment	Location/Installed	DMA Study Type	Vegetation Type	Ecological Status-Seral	Vegetation Trend
	South Mink (Catch unit)/2006	Critical	Willow/bluegrass	Early	Static
	Located at an old photo site. This site does not have perennial flow and DMA is dry on below 90% precipitation years. Willows are well established and maturing. Hydric species are decreasing with the continued dry seasons.				
	South Mink (enclosure)/2006	Reference	Willow/ sedge	Late	Static
	The riparian species are drying as it is in all of the South Mink drainage and reflected by the reduced hydric species.				
	South Mink (Unit 6)/2013	Representative	Willow/sedge	Mid	Need data
	East Mink (Lower Cow camp)/2013	Representative	Birch/ rush	Early	Need data

### IMPROVEMENTS

The Term Grazing Permit will have a list of improvements. The following tables outlined the proposed schedule for the range structural improvements: .

Table A-5. Michaud Project schedule

Michaud Project/Location	Date
<ul style="list-style-type: none"> <li>Off source watering developments – Michaud Cr – Work with adjacent private land</li> <li>Work with Pvt land (FMC) to improve water developments</li> <li>Natural barriers along creek trailing – Michaud Cr – Pvt land</li> <li>Look to clean up fence hazards of old wire on FMC reclaimed land</li> <li>BLM trough and Boundary fence needs renovation</li> <li>Trail Creek – trough renovate</li> <li></li> </ul>	2018  2018 2016 2019 2017 2015

Table A-6. Midnight Project schedule

Midnight Project/Location	Date
<ul style="list-style-type: none"> <li>Horse Lakes – enclosure</li> <li>Dead Cow – increase water capacity from fenced off of Horse Lakes</li> <li>Deer Pass Gulch trough - relocate out of AIZ</li> <li>Renovate Monument Gulch trough</li> <li>Apply a &lt;10% herbaceous utilization standard in Elk Meadows (trigger)</li> <li><b>OR</b> fence Elk Meadows loop, take out 3 miles and add 3 miles</li> <li>Fence out two ponds in Elk Meadows area.</li> <li>Renovate boundary fence with BLM to create unit division</li> </ul>	2016 2016 2017 2018 2015  2015 2017

Table A-7. Pocatello Project schedule



Pocatello Project/Location	Year
<p>West</p> <ul style="list-style-type: none"> <li>• Rehab/relocate: Wakley Springs pond/trough system</li> <li>• Coral Spring rehab bench and add trough- fence pond and install trough. Work with City to remove diversion infrastructure.</li> <li>• Catch unit- State section – renovate trough &amp; convert pond to trough</li> <li>• Buggy springs – convert pond to trough, move use out of AIZ</li> <li>• Look at fencing disperse camping around pine plantation (180 acres) and new trough</li> <li>• </li> </ul>	<p>2015</p> <p>2020</p> <p>2017</p> <p>2016</p> <p>2015</p>
<p>Middle</p> <ul style="list-style-type: none"> <li>• Cherry Springs trough – relocate out of AIZ</li> <li>• Valve House trough – relocate out of AIZ</li> <li>• Box Canyon trough – relocate out of AIZ</li> <li>• Blind Springs – relocate out of AIZ</li> <li>• Lead Draw – pond to trough conversion</li> <li>• -</li> </ul>	<p>2017</p> <p>2016</p> <p>2015</p> <p>2018</p> <p>2019</p>
<p>East</p> <ul style="list-style-type: none"> <li>• Walker Cr – drift fences (2) to create riparian unit for 1 mile of creek</li> <li>• Indian Creek trough move out of AIZ – currently nonfunctional</li> <li>• Bell Marsh - rebuild drift fence to create an upper and lower bell marsh units.</li> <li>• Bell Marsh – renovate trough</li> <li>• Goodenough- renovate trough</li> <li>• Renovate ponds (into troughs) in the top of Walker</li> <li>• Coordinate with BLM to install online fences at Goodenough Campground</li> <li>• </li> </ul>	<p>2015</p> <p>2017</p> <p>2016</p> <p>2018</p> <p>2017</p> <p>2018</p> <p>2016</p>

Pocatello Project/Location	Year
Recreation Interaction: <ul style="list-style-type: none"> <li>• Blind Springs cattle guard</li> <li>• Install information signs in Kiosk- So. East, and upper canyon where grazing occurs.</li> <li>• Install “close the gate signs” (Admin)</li> <li>• Install steel swing gates in high use areas</li> <li>• Update and use District website to inform public of rotations of livestock. Notify public where cows are.</li> </ul>	2015  2016   2015  2017  2015

## TERM GRAZING PERMIT ADMINISTRATION ADAPTIVE MANAGEMENT

Term Grazing Permit Administration Adaptive Management is a type of natural resource management that implies making decisions as part of an on-going process. Monitoring the results of actions will provide a flow of information that may indicate the need to change a course of action. Scientific findings and the needs of society may also indicate the need to adapt resource management to new information (*2003 Caribou RFP*).

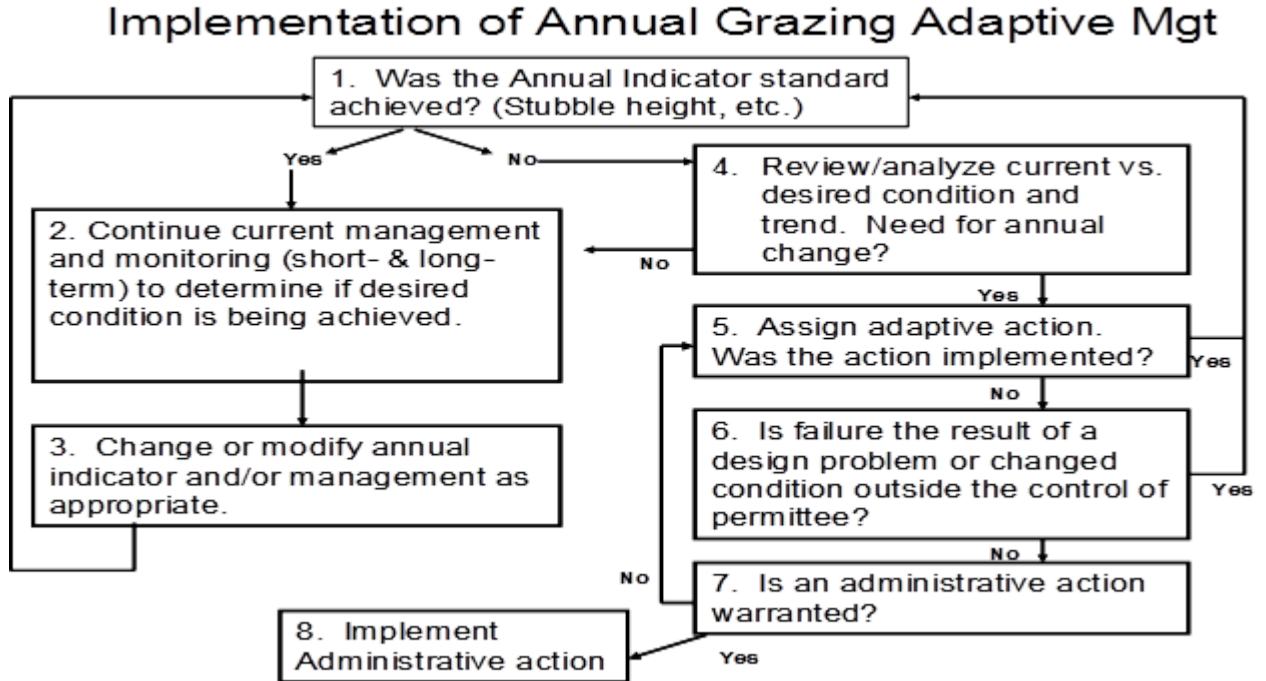
The administrative adaptive management procedure requires focusing on both annual and long-term monitoring to determine whether management is effectively meeting long-term objectives. Establishing a relationship between annual grazing use and achievement of long-term objectives emphasizes the use of end-of-season annual grazing-use-indicators, as well as long-term indicators of rangeland condition. Within-season annual grazing-use-indicators may also be established through the adaptive management process to determine when livestock should be moved from a grazing unit or area to achieve the desired end-of-season grazing-use levels.

Regular annual monitoring (i.e. stubble height, utilization techniques, photos, field notes) will occur on the allotment to evaluate whether the *2003 Caribou RFP* standards and guidelines are being met. When annual monitoring indicates that these standards are not being met one of the following will occur to help remedy the problem: refer to *Caribou National Forest Riparian Grazing Implementation Guide* (GIG) to establish more appropriate utilization standards (i.e. more stringent standards and guidelines), long-term monitoring (i.e. Riparian MIM study, Nested Frequency), additional annual monitoring, permit action, etc.

Current long-term trend studies (i.e. Nested Frequency, Riparian MIM study, Photo point(s)) should be re-read on a regular interval (typically between 5 and ten years, or as needed) to evaluate the overall trend of habitat and habitat conditions. In areas where annual monitoring shows a decline or regress in conditions, long-term trend will be used in conjunction with any of

the techniques discussed in this section (e.g. changing GIG standards, grazing rotations, range improvements), to establish a baseline of conditions to monitor.

Administrative Adaptive management, as prescribed in this AMP, is implemented by using the following adaptive management decision tree.



**Figure A-1 Administrative Adaptive Management**

Other methods that may be used to achieve management goals and objectives could include one or more of the following:

Alteration of Grazing Routes: Alteration of designated trailing routes and grazing rotations to avoid resource damage, avoid use conflicts, reduce grazing pressure in specific areas, improve distribution, access unused grazing areas, facilitate shipping, or facilitate rest or deferred rotation grazing.

Rest Allotment (i.e., closure to grazing for a full year): Rest the allotment or areas within the allotment when monitoring shows that trends are not moving toward Desired Future Conditions, or are not stable, improving, or improving at an adequate rate. Rest may also be implemented where fire, flood, or other occurrences detrimentally impact resource conditions or where treatment activities require a period of rest to allow for recovery of the site. When rest is required, specific recovery criteria will be developed to indicate when grazing is expected to resume.

Closure of Areas: Areas within the allotment should be closed where monitoring shows that desired conditions cannot be met while sustaining any grazing use. This may include alteration of allotment boundaries or identification of specific areas within an allotment where livestock grazing will not be allowed. The AMP and term grazing permit may be modified to identify the change in the allotment boundary or the area closure.

**Modify Season of Use:** The season of use could be adjusted for the following reasons: meet the needs of Threatened and Endangered Species (TES), take advantage of available forage, respond to climatic variations, avoid grazing conflicts with other resources, meet the needs of the permittee, etc. Adjustments to stocking and season of use may be considered jointly or separately as appropriate.

**Modify Stocking Rates:** Adjust authorized or permitted livestock numbers during all or a portion of the grazing season to match grazing use to resource conditions and productivity. Adjustments to stocking and season of use may be considered jointly or separately as appropriate.

**Grazing Restrictions – Modification of Indicators of Annual Grazing Use:** Annual grazing use indicators generally consist of measures of allowable grazing use including: forage utilization, woody species utilization, streambank disturbance, soil disturbance, etc. Levels of acceptable use are set for some of these practices in the 2003 Caribou RFP. These levels or indicators of livestock use may be modified or other indicators identified as needed to facilitate achievement of objectives and desired conditions. Modification of these indicators will be consistent with the direction established in the most recent version of the GIG.

**Range Improvements – Structural and Nonstructural:** Actions may include construction of water developments, fences, corrals and other permanent livestock handling facilities, trails, bridges, prescribed fire, noxious weed treatment, vegetation seeding, aspen stand treatments, sagebrush manipulation, etc. Additional NEPA analysis will be required for these activities unless they are currently covered under existing NEPA analysis (e.g. noxious weed management activities).

### **Management Direction**

Annual Operating Instructions (AOI) will be prepared and discussed with the permittee before each season. The AOI will include the rotation for that year, special concerns and instructions as well as reminders of specific utilization standards and guidelines for the allotment. The AOI is part of the permittee's term grazing permit.

The following information would be collected on a regular basis:

Allotment inspection information will be used to adjust the Annual Operating Instruction, determine and adjust proper carrying capacity, and to document compliance with terms and conditions of the grazing permit.

Table A-8 Inspection components

<b>Type of Inspection</b>	<b>Frequency</b>
Count-coordinate with permittee on random basis	Cattle will be counted when entering and/or exiting the allotment, and brands will be inspected at this time
Salting/Grazing Distribution	Periodic inspections should be conducted throughout the grazing season. No salt will be place within a riparian areas or adjacent to designated trail or trail head.
Range Improvement Maintenance	Periodic inspections for improvement maintenance should be conducted prior to livestock entry into the allotment and prior to scheduled pasture moves.
AOI compliance	Inspections for AOI compliance should occur at least once during the grazing season.





